De *Monstris*

An Exhibition of Monsters and the Wonders of Human Imagination

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De Monstris:
An Exhibition of Monsters and the Wonders of Human Imagination

Exhibition and catalogue by David A. Fernández

Thomas Fisher Rare Book Library, University of Toronto

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FOREWORD

Creatures with giant feet, wondrous griffins, and figures from gothic horror, such as Frankenstein and Dracula, can all be found in the Thomas Fisher Rare Book Library. In his exhibition, *De monstris,* David Fernández explores the Library's vast collections in search of these fantastical creatures. Using medieval encyclopedias, wonder books, travel guides, natural history volumes, medical texts, and popular books, the exhibition reveals the complex history of monsters in the West from the Middle Ages to the Victorian era. As David reveals, while the medieval basilisk and the modern gothic monster may seem unrelated, both served as important social tools. How monsters were created over the centuries is more indicative of the moral and existential challenges faced by societies than the realities that they encountered. The chimerical beasts and grotesque creatures inhabiting the pages of the Fisher collections reflect the boundaries, norms, and beliefs of their times. Today, monsters continue to fascinate, enchant, and inspire awe. They also reflect our fears and anxieties.

I wish to acknowledge the wonderful support of Janet Dewan and Barbara Tangney for this catalogue and the Friends of the Thomas Fisher Rare Book Library for this exhibition. We are also grateful to Debbie Dearlove, David Mason, and Eric Robertson for lending us their materials for display. Above all, I wish to thank David for this remarkable exhibition and for daring us to join him on a monstrous journey through the Fisher collections and the dark corners of our imagination.

Loryl MacDonald
Interim Director of the Fisher Rare Book Library

PREFACE

A question that might occur to a visitor to a rare books and manuscripts library might be: why monsters? All of us, at one time or another, have come into contact with monsters in popular culture. They jump out at us from movie screens, newspapers, folklore, internet reports and rumours, children's stories, television and theatre. They live in the shadowy spaces of our houses and our communities. They lurk at the edges of light and the bounds of certainty, just outside the reach of the law. They terrify us and force us to clutch at what we hold most dear. Given the proliferation of monsters in popular cultures around the world and their sometimes trivial or superficial nature, it may come as a surprise that, historically speaking, monsters are a serious business. *De monstris*, superbly conceived and curated by David Fernández, provides a fascinating perspective onto the learned traditions of thinking about monsters and recognizes that monsters have been around for a long, long time.

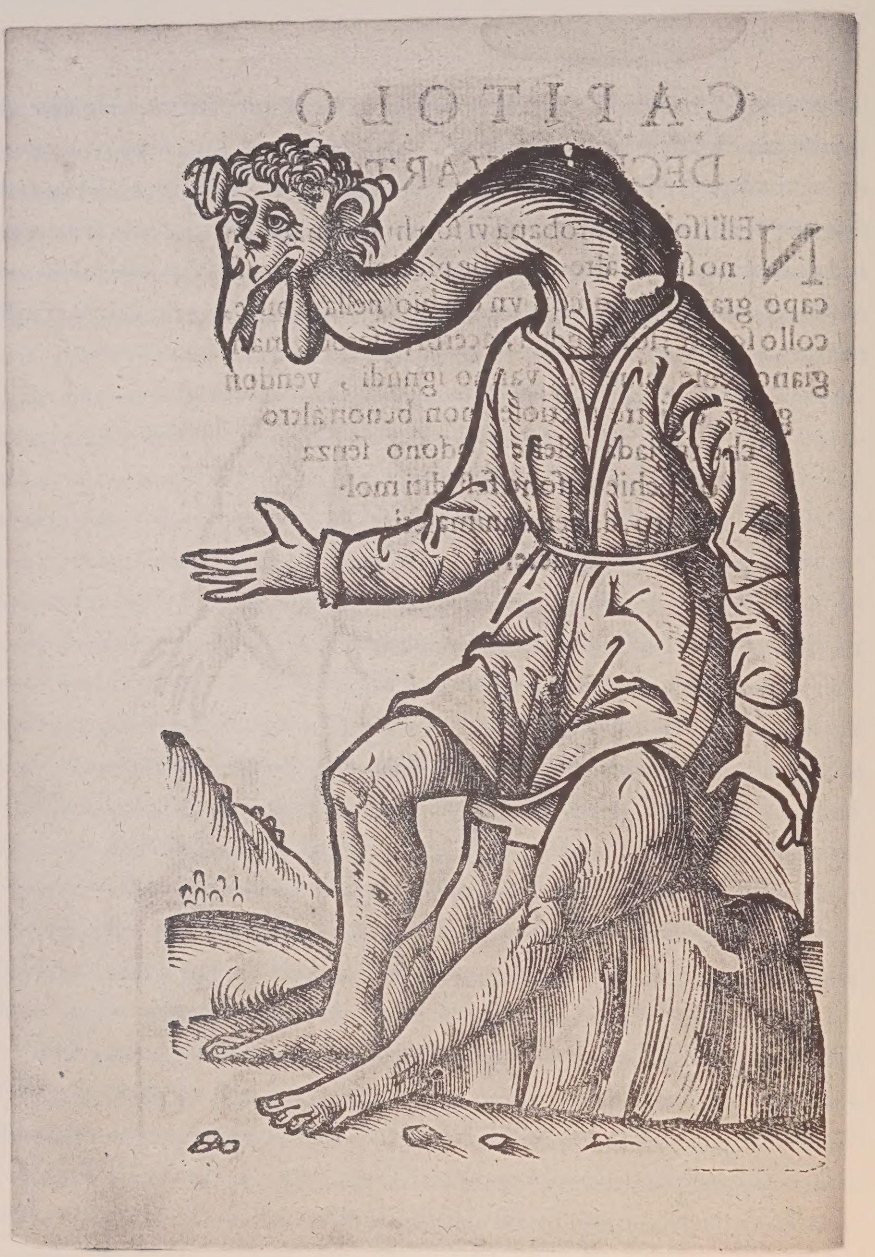
The books in this exhibition all share one assumption in common: in whatever form they may take, and whenever and wherever they appear, monsters lie at the basis of serious inquiry and investigation. We find some of western culture's most noted and consequential thinkers among these tomes, some of its most intrepid adventurers, and some of its most renowned storytellers whose work spans a rich array of scholarly disciplines: geography, theology, history, cosmography, astronomy, anthropology, cartography, zoology, medicine, and natural history. Monsters regularly – we could even say *necessarily* – appear at moments when knowledge takes new turns and received traditions are questioned; they represent certain values held by societies at the times when those values are threatened, questioned, or put into crisis. Such moments encourage sustained reflection on the nature and symbolic dimensions of monsters, on how monsters both emerge from the fantastic dimensions of the imagination and are also the objects of disciplined and sober scholarly scrutiny. Reacting to monsters with dread and fear is a relatively recent phenomenon, exemplified by the famous novels of Mary Shelley and Bram Stoker. Prior to this time, however, the more common emotional posture toward monsters was wonder and amazement, if emotion was involved at all. For, at least since the time of the Roman scholar Pliny the Elder, many thinkers regularly approached monsters dispassionately and with presence of mind. This commitment to thoughtful reflection in addition to the wondrous and extraordinary dimensions of monsters, is exceptionally evident in *De monstris.* These books and ephemera are jewels of the Fisher Library collection. As repositories of the real and the imagined, they collectively issue an appealing invitation: here be monsters.

Josiah Blackmore
Harvard University

INTRODUCTION

Monsters exist at the boundaries of human imagination. Wherever history takes us, stories of monsters, prodigies, wondrous beasts, and natural wonders endure to this today as integral elements of our shared cultural heritage. Their origins have long been associated with our subconscious fear of the unknown and relentless fascination with unexplained phenomena. The word monster is in itself indicative of the intricate etymological and historical meaning of their place and role in our culture. *Monster* is a derivative of the Latin word *monstrum*, which simultaneously traces its roots to the words *monere* (to warn) and *monstro* (to show). In the same category, the word *prodigy* derives from the Latin *prodigium* (portent), which also denotes something extraordinary which is considered an omen or sign of future events. Solely by their definition monsters (and their cognates) have the potential to reveal, perhaps more than any other human creation, the most complex sides of our culture and history. Modern ideas of race and racism are grounded in historical traditions surrounding the supposed monstrous peoples of the medieval and early modern periods. Contemporary concepts of gender and sexuality are evocative of the culture of monstrosity in the medical and scientific theories of the eighteenth and nineteenth centuries. Even our attraction to popular fantastic creatures is deeply rooted in the ancient lore of wonders and marvels of nature. Every historical period has ultimately conceived its own monsters as expressions of precise cultural, social, religious, and political realities. Monsters are thereby symbolic 'cultural bodies' that not only show us who we are as humans but also demonstrate particular ideas, feelings, places, and moments in our culture and history.[1] Today, monsters fundamentally survive as stories that continue to evoke the most basic of our emotions—horror, pleasure, or repugnance—and to inspire the imagination of readers across the world.

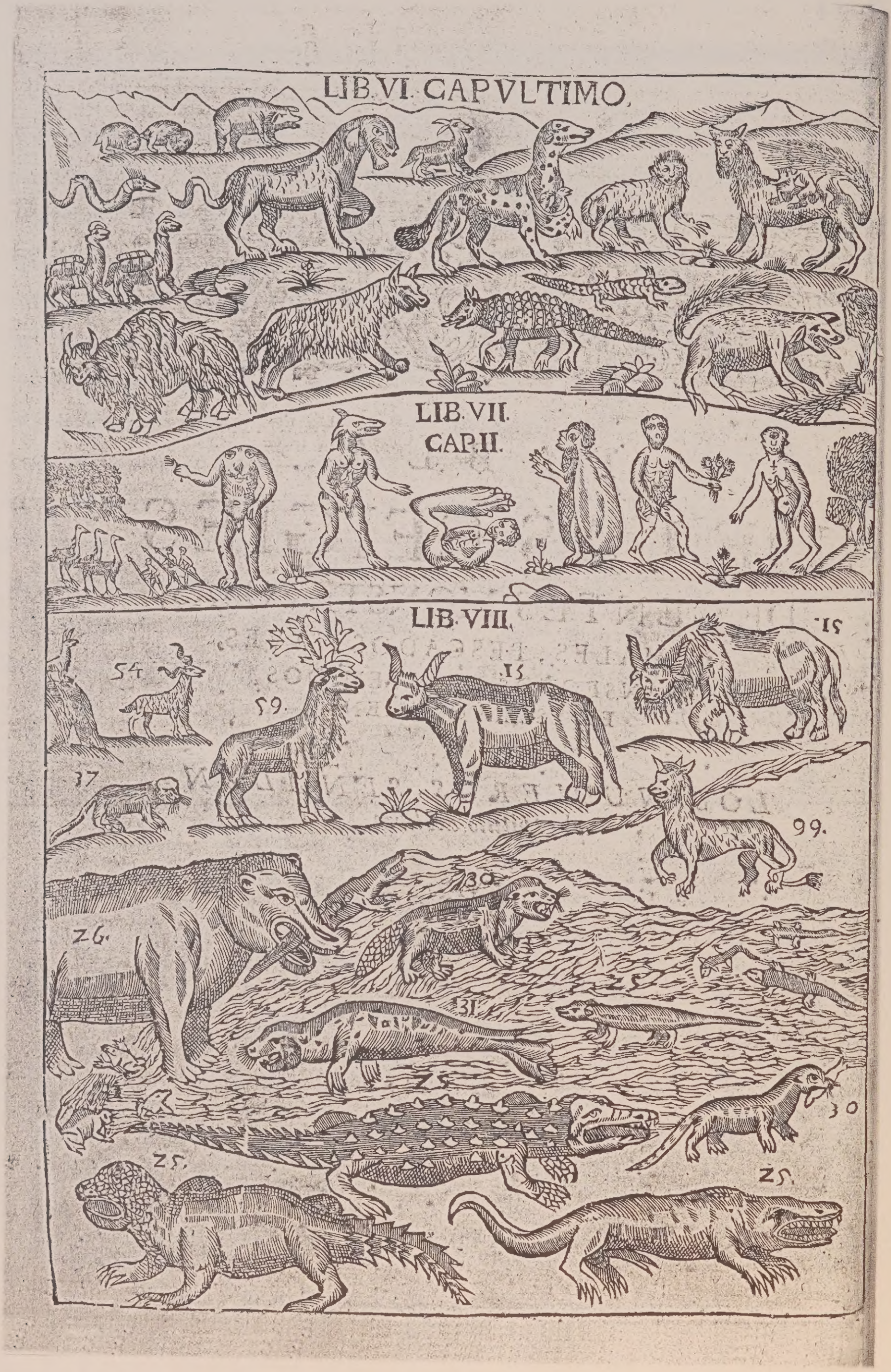
De monstris is an exhibition about the European culture of writing on monsters and monstrosity from the Middle Ages to the end of the Victorian era. The exhibition explores the textual and visual sources at the heart of the stories of monsters recounted in the pages of medieval encyclopedias, wonder books, cosmographies, compilations of travels, natural history volumes, medical texts, and other popular books. Beyond showcasing the remarkable collections of the Thomas Fisher Rare Book Library in the areas of history, medicine, science, and literature, the exhibition follows the main traditions in the history of monsters in the West. The manuscripts, printed books, maps, and ephemeral material on display reflect the historical interpretations of monsters as natural errors, as warnings of future events, or as wonders of nature. Finally, the exhibition questions our knowledge of and possible assumptions concerning the subjects of monsters and monstrosity by presenting a selection of textual and visual narratives that made notable contributions to the history of monsters in Europe over the course of eight centuries.



9 Monster from *Aggivnta alla quarta parte dell'Indie* (1623).

Part I:
On Monstrous Peoples

Secular authors and early Christian writers of the Middle Ages imagined a world awash with monsters. Natural history encyclopedias, compendia of knowledge, and theological treatises were among the most prominent sources of theories on the origins, characters, and manners of monstrous peoples. These monsters were principally reported to inhabit the continents of Africa and India. Individual accounts of dog-headed peoples, nations of headless humans, and a legion of human-animal hybrids were commonly explained within the tradition of natural wonders or, concurrently, as moral and religious prodigies. As a result, the vision of the cultures, religions, and societies found at the periphery of Christianity was tied to certain notions of monstrosity reproduced in a limited number of very influential medieval treatises. The arrival of new printing technologies effectively narrowed the distance between the medieval monstrous peoples of faraway lands and the monsters and prodigies reported in Europe during the fifteenth and sixteenth centuries. What once was unique to medieval manuscripts was then widely disseminated in new printed formats which were rapidly adapted to serve the cultural, social, political, and religious contexts of the early modern period.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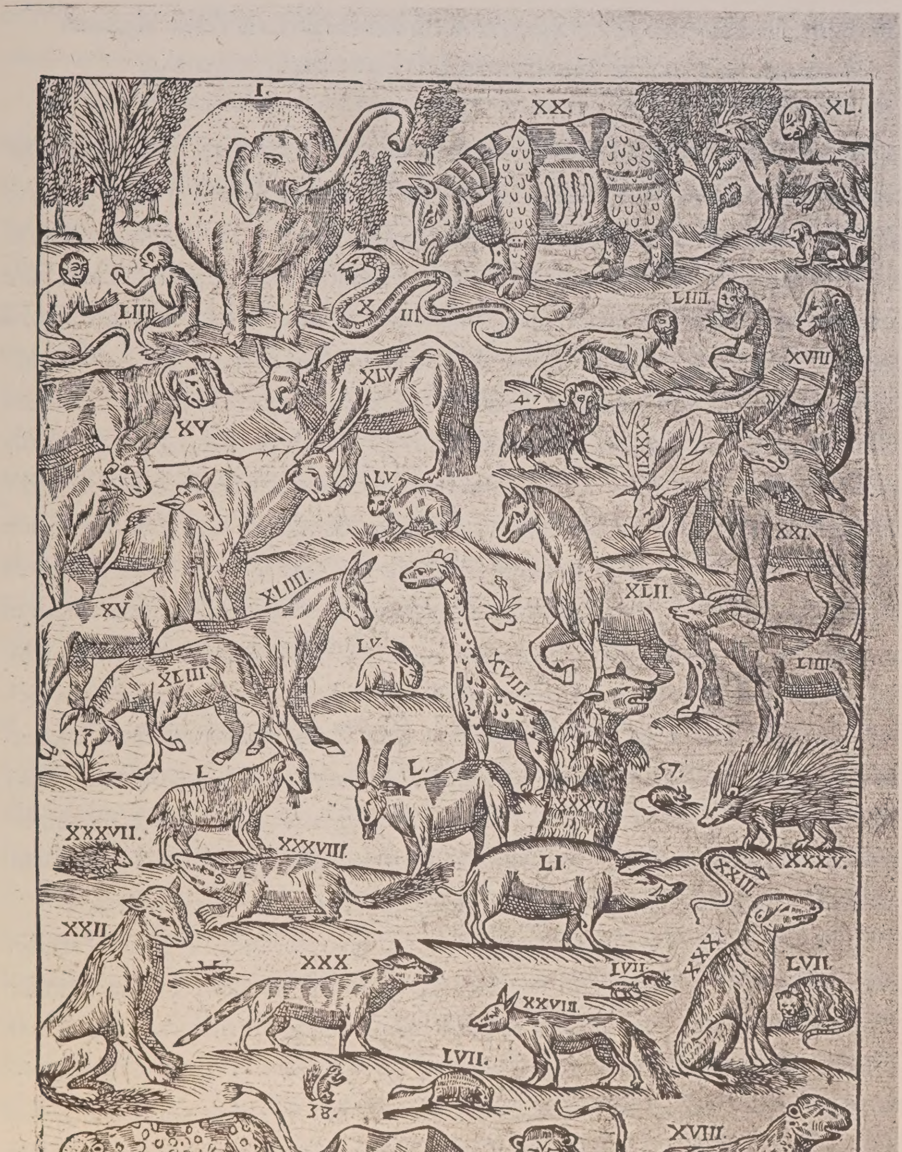
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1 ‘Table of effigies, monstrous peoples, animals, fish, birds, and insects’ from *Historia natural de Cayo Plinio Segundo* (1624-1629).

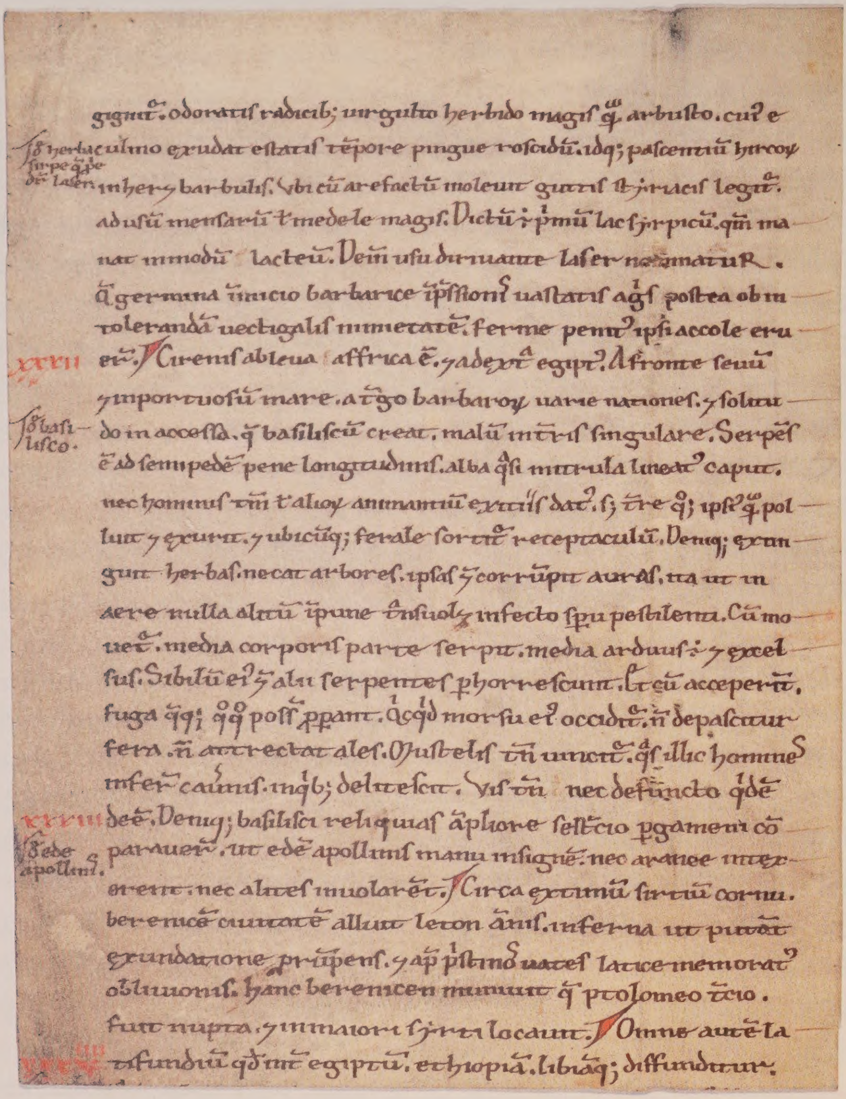
1 Pliny, the Elder (ca. 23–79 A.D.). *Historia natural de Cayo Plinio Segundo; traducida por Gerónimo Huerta.* Madrid: Luis Sánchez, 1624–1629.

In a letter to his friend Baebius Macer, Pliny the Younger (61–ca. 113 A.D.) remembers his adopted father and maternal uncle as an indiscriminate reader for whom 'no book was so bad that it was not useful at some point.'[2] The maxim aptly describes this active Roman commander who spent most of his spare time surrounded by books, papers, readers, and scribes while compiling material for the monumental thirty-seven books of Pliny the Elder's *Natural History*, his only extant work and one of the most popular sourcebooks on natural history ever published. *Natural History* is an impressive library of ancient knowledge with an emphasis on human interaction with the natural world.[3] In the preliminary text to the first volume, Pliny indicates that his objective is to collate the 'world of nature, or in other words life' into an all-encompassing work with the mission to 'give novelty to what is old, authority to what is new' and to 'render what is slighted acceptable, and what is doubtful worthy of our confidence.'[4] Ranging from astronomy to zoology, Pliny's encyclopedia comprises over 35,000 facts taken from sources on the natural world written by more than four hundred Greek and Roman authors, many of which only survive in his writings.[5] *Natural History* is, as the author's nephew declares, a collection of ancient and contemporary writings 'no less varied than nature herself.' [6] Pliny remarks on the qualities of minerals in the context of pigments as he discusses the authority of ancient authors on magic, describes the process of making papyrus, and records with credulity the appearance and customs of monstrous peoples found in distant lands.

Pliny's writings on monstrous peoples in the seventh volume of *Natural History* established the tradition of wonders of nature in the medieval period.[7] Plinian monsters such as the cynocephali or 'tribes of human beings with dog's heads' and 'men called the monoculi who have only one leg' survive not only in some of the two hundred extant manuscripts of *Historia naturalis*,[8] but these humanoid beings also exist in most medieval encyclopedias dealing with monsters, including the *Ethimologiae* of Isidore of Seville (ca. 560–636) and the *Collectanea rerum memorabilium* of Caius Julius Solinus (3rd century).[9] The *editio princeps* of 1469 printed in Venice was followed by another thirty-eight incunable editions, and by the year 1599 there were eighty-nine editions of *Natural History* altogether.[10] From treatises on natural philosophy to geographical surveys and medical texts, European authors and readers continually incorporated Pliny's works in numerous ways, granting him the status of the 'most cited authority' on monsters and marvels in the early modern period.[11]

In a sonnet included in the preliminary text to the first volume of this Spanish edition of *Historia natural de Cayo Plinio Segundo*, Alonso de Castillo Solórzano (1584–1647) compares Pliny to Christopher Columbus (1451–1506) in his quest to 'investigate the secrets of the natural world.'[12] First published in Madrid in 1599, this later edition of Huerta's translation contains all thirty-seven volumes, a 'table of effigies, monstrous peoples, animals, fish, birds, and insects' in the form of woodcut illustrations, along with one additional 'anotación' at the end of the sixth book describing the natural history of the Americas as a land of 'bestial peoples.' Following Pliny's uncritical and factual reports of the customs and appearance of peoples residing at the edges of the *ecumene*, this additional chapter takes an imperial stand by classifying entire indigenous populations as 'bestial and barbaric' peoples, some of which are simply known for their peculiar looks such as the mythical giants of the Patagonia or the peoples of very short stature found near Greenland, while others come to embody the infamous 'flesh eaters or Cannibals' of the Caribbean and South America.[13]

2 Caius Iulius Solinus (3rd century). ***Collectanea rerum memorabilium*. Ca. 1100.** Solinus's *Collectanea rerum memorabilium*, or *Polyhistor*, is a 'vast storehouse' of knowledge of monsters, marvels, and other curiosities of nature largely based on Pliny's *Natural History*.[14] Rome opens this grand tour of geographical knowledge of the ancient world that captured the imagination of generations of readers with the wonders found in the geography of Western Europe, the Mediterranean, Northern Africa, the Near East, and India. Solinus's compendium stands as one of the most consulted sources on geography and wonders by authors from late antiquity to the Renaissance.[15] The popularity of the *Polyhistor* rests not in its original content but in its ability to provide access to hundreds of references from Pliny's *Natural History* and the *De situ orbis* of Pomponius Mela (ca. 15–45 A.D.) into one condensed work of tremendous value for readers, scribes, and authors.[16] Catalogues of numerous medieval libraries in Europe listed Solinus in their holdings before the end of the thirteenth century,[17] while readers of the same period also experienced the wonders of the *Polyhistor* in medieval world maps, bestiaries, and even in the writings of Christian authors like Saint Augustine (354-430) and Isidore of Seville.[18]



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deē. Deniq; baſiliſci reliquiaſ ãpliore ſeſtcio pgameni cõ
parauer̃. ut edẽ apolliniſ manu inſignẽ. nec aranee intex
erent. nec aliteſ inuolarēt. Circa extimū ſinū cornu.
berenicẽ ciuitatẽ alluit lecon ãniſ. inferna ut putãt
exundatione priuſ penſ. ⁊ a p̃ p̃ſtino uateſ latice memorat⁹
obliuioniſ. hanc berenicen muniuit q̃ ptolomeo t̃cio.
fuit nupta. ⁊ in maiori ſirti locauit. Omne autẽ la
tifundiū q̃d int̃ egiptū. ethiopiã. libiãq; diffunditur.

ſ8 herba ſirpe q̃ p̃e dr̄ laſer.

XXVII

ſ8 baſiliſco.

XXVIII

ſ8 ede apollinis.

XXVIIII

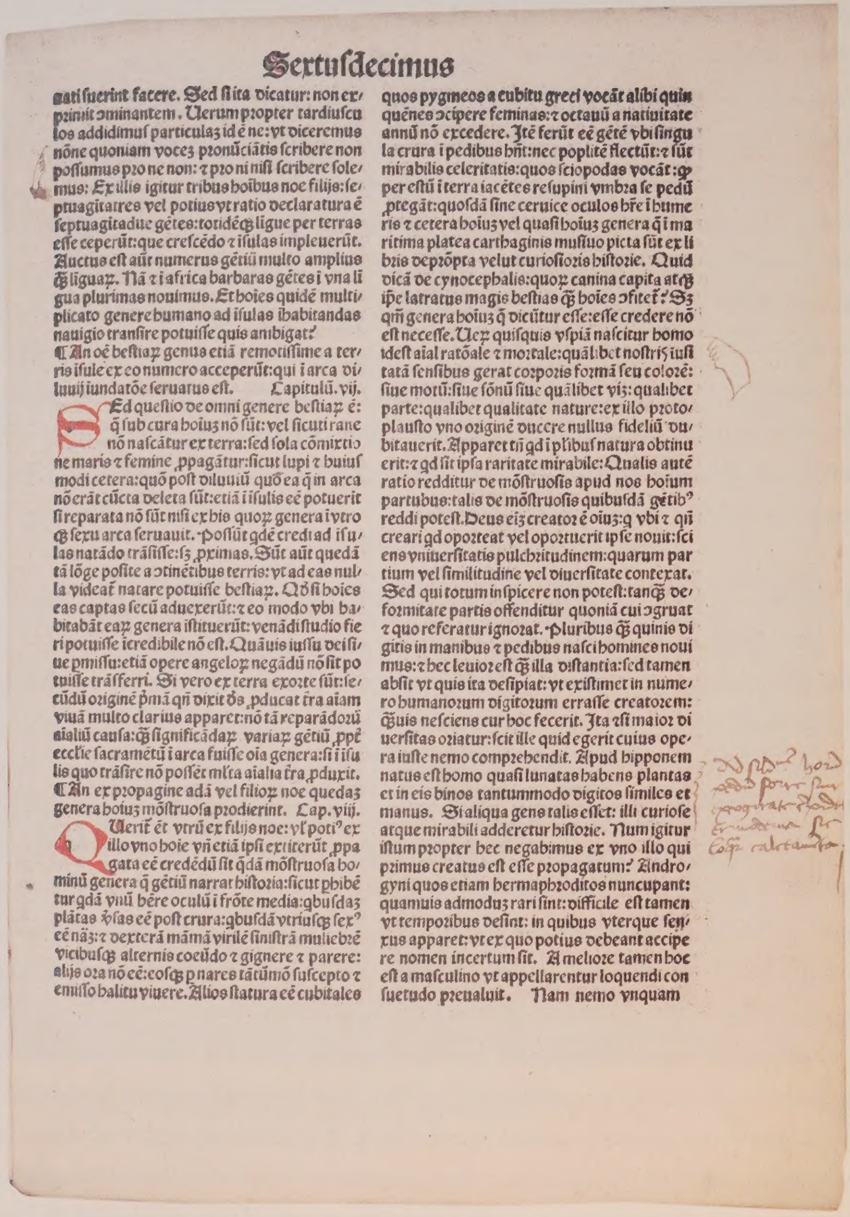
2 ‘Basilisk’ from *Collectanea rerum memorabilium* (ca. 1100).

Solinus's descriptions of monstrous peoples in parts of Asia, Africa, and India travelled across the leaves of medieval manuscripts for over a millennium and into the pages of books in European collections after the advent of printing. The first incunable edition of the *Polyhistor* comes out of the Venetian press of Nicholas Jenson (ca. 1420-1480) in 1473, followed by ten fifteenth-century editions and early vernacular versions published by the end of the sixteenth century in Spanish (1524), Italian (1557), English (1587), and German (1600).[19] The Renaissance naturalist and collector Ulisse Aldrovandi (1522-1605), who cites Solinus's description of the one-eyed monoculi or sciapods in his *Monstrorum historia*,[20] owned a copy of a commentary on the compendium published in Basel in 1557.[21] Aside from printed editions, complete copies, excerpts, and fragmentary versions of the *Polyhistor* exist in more than 250 manuscripts today.[22] This single leaf belonged to a manuscript copied about the year 1100, perhaps in Germany, containing a description of the emblematic creature known as the basilisk: 'a serpent almost half a foot long,' reads the entry, 'given to the utter destruction not only of man and beast, or whatsoever has life, but also even of the earth itself.'[23]

3 Saint Augustine of Hippo (354–430). *De civitate Dei*. Venice: Bonetus Locatellus for Octavianus Scotus, 1486–1487.

The prolific Christian theologian and philosopher Saint Augustine of Hippo began composing his influential apologetic treatise in vindication of Christianity following the events of the Sack of Rome in 410.[24] Published between 413 and 426, the *City of God against the Pagans* provided Christian readers and others at the periphery of Christianity with an extensive collection of themes brought together in twenty-two books and explained via the metaphor of the two cities: the holy city of God and the earthly city of humanity.[25] In his treatise, Augustine compiles a variety of sources from secular writers in Latin and Greek to advance his ideas on political theory, philosophy of history, cosmology, theology, biblical interpretation, and writings on eschatology.[26]

In chapter eight of book sixteen, Augustine confronts one of the most profound questions in the history of monsters in the West. 'Another moot question is whether we are to believe that certain monstrous races of men,' Augustine inquires, 'were descended from the sons of Noah, or rather from that one man from whom they themselves sprang.'[27] Augustine reproduces in his answer the monstrous peoples of the seventh book of Pliny's *Natural History*, and then offers his own accounts of monsters in books fifteen to eighteen



Sextusdecimus

nati fuerint facere. Sed si ita dicatur: non expriit ɔminantem. Uerum ꝓpter tardiusculos addidimus particulā id ē ne: vt diceremus nōne quoniam voce pronūciātis scribere non possumus pro ne non: ⁊ pro ni nisi scribere solemus: Ex illis igitur tribus hoībus noe filijs: septuagitatres vel potius vt ratio declaratura ē septuagitadue gētes: totidēq; ligue per terras esse ceperūt: que crescēdo ⁊ isulas impleuerūt. Auctus est aūt numerus gētiū multo amplius q̄ liguaꝝ. Nā ⁊ i africa barbaras gētes i vna ligua plurimas nouimus. Et hoīes quidē multiplicato genere humano ad isulas ihabitandas nauigio transire potuisse quis ambigat?

¶ An oē bestiaꝝ genus etiā remotissime a terris isule ex eo numero acceperūt: qui i arca diluuij iundatōe seruatus est. Capitulū. vij.

Sed questio de omni genere bestiaꝝ ē: q̄ sub cura hoīu nō sūt: vel sicuti rane nō nascātur ex terra: sed sola cōmixtione maris ⁊ femine ꝓpagātur: sicut lupi ⁊ huius modi cetera: quō post diluuiū quō ea q̄ in arca nō erāt cūcta deleta sūt: etiā i isulis eē potuerit si reparata nō sūt nisi ex his quoꝝ genera i vtroq; sexu arca seruauit. Possūt qdē credi ad isulas natādo trāsisse: s; ꝓximas. Sūt aūt quedā tā lōge posite a ɔtinētibus terris: vt ad eas nulla videat̄ natare potuisse bestiaꝝ. Qō si hoīes eas captas secū aduexerūt: ⁊ eo modo vbi habitabāt eaꝝ genera istituerūt: venādi studio fieri potuisse icredibile nō est. Quāuis iussu dei siue ꝑmissu: etiā opere angeloꝝ negādū nō sit potuisse trāsferri. Si vero ex terra exorte sūt: secūdū originē ꝑmā qn̄ dixit ds̄ ꝓducat t̄ra aīam viuā multo clarius apparet: nō tā reparādorū aīaliū causa: q̄ significādaꝝ variaꝝ gētiū ꝓpt̄ eccl'ie sacramētū i arca fuisse oīa genera: si i isulis quo trāsire nō possēt mlt'a aīalia t̄ra ꝓduxit.

¶ An ex propagine adā vel filioꝝ noe quedā genera hoīu mōstruosa prodierint. Cap. viij.

Querit ēt vtrū ex filijs noe: vl' potiꝰ ex illo vno hoīe vn̄ etiā ipsi extiterūt ꝓpagata eē credēdū sit q̄dā mōstruosa hominū genera q̄ gētiū narrat historia: sicut ꝑhibētur qdā vnū hēre oculū i frōte media: qbusdā plātas ꝯsas eē post crura: qbusdā vtriusq; sexꝰ eē nāā: ⁊ dexterā māmā virilē sinistrā muliebrē vicibusq; alternis coeūdo ⁊ gignere ⁊ parere: alijs ora nō eē: eosq; p nares tātūmō suscepto ⁊ emisso halitu viuere. Alios statura eē cubitales quos pygmeos a cubitu greci vocāt alibi quinquēnes ɔcipere feminas: ⁊ octauū a natiuitate annū nō excedere. Itē ferūt eē gētē vbi singula crura i pedibus hn̄t: nec poplitē flectūt: ⁊ sūt mirabilis celeritatis: quos sciopodas vocāt: q per estū i terra iacētes resupini vmbra se pedū ꝓtegāt: quosdā sine ceruice oculos hr̄e i humeris ⁊ cetera hoīu vel quasi hoīu genera q̄ i maritima platea carthaginis musiuo picta sūt ex libris deprōpta velut curiosioris historie. Quid dicā de cynocephalis: quoꝝ canina capita atq; ipe latratus magis bestias q̄ hoīes ɔfitet̄? S; q̄m genera hoīu q̄ dicūtur esse: esse credere nō est necesse. Uez quisquis vspiā nascitur homo idest aīal ratōale ⁊ mortale: quālibet nostris īusitatā sensibus gerat corporis formā seu colorē: siue motū: siue sōnū siue quālibet vi: qualibet parte: qualibet qualitate nature: ex illo protoplausto vno originē ducere nullus fideliū dubitauerit. Apparet tn̄ qd i plribus natura obtinuerit: ⁊ qd sit ipsa raritate mirabile: Qualis autē ratio redditur de mōstruosis apud nos hoīum partubus: talis de mōstruosis quibusdā gētibꝰ reddi potest. Deus eiz creator ē oīu: q vbi ⁊ qn̄ creari qd oporteat vel oportuerit ipse nouit: sciens vniuersitatis pulchritudinem: quarum partium vel similitudine vel diuersitate contexat. Sed qui totum inspicere non potest: tanq; deformitate partis offenditur quoniā cui ɔgruat ⁊ quo referatur ignorat. Pluribus q̄ quinis digitis in manibus ⁊ pedibus nasci homines nouimus: ⁊ hec leuior est q̄ illa distantia: sed tamen absit vt quis ita desipiat: vt existimet in numero humanorum digitorum errasse creatorem: q̄uis nesciens cur hoc fecerit. Ita ⁊ si maior diuersitas oriatur: scit ille quid egerit cuius opera iuste nemo comprehendit. Apud hipponem natus est homo quasi lunatas habens plantas et in eis binos tantummodo digitos similes et manus. Si aliqua gens talis esset: illi curiose atque mirabili adderetur historie. Num igitur istum propter hec negabimus ex vno illo qui primus creatus est esse propagatum? Androgyni quos etiam hermaphroditos nuncupant: quamuis admoduz rari sint: difficile est tamen vt temporibus desint: in quibus vterque sexus apparet: vt ex quo potius debeant accipere nomen incertum sit. A meliore tamen hoc est a masculino vt appellarentur loquendi consuetudo preualuit. Nam nemo vnquam

[illegible]

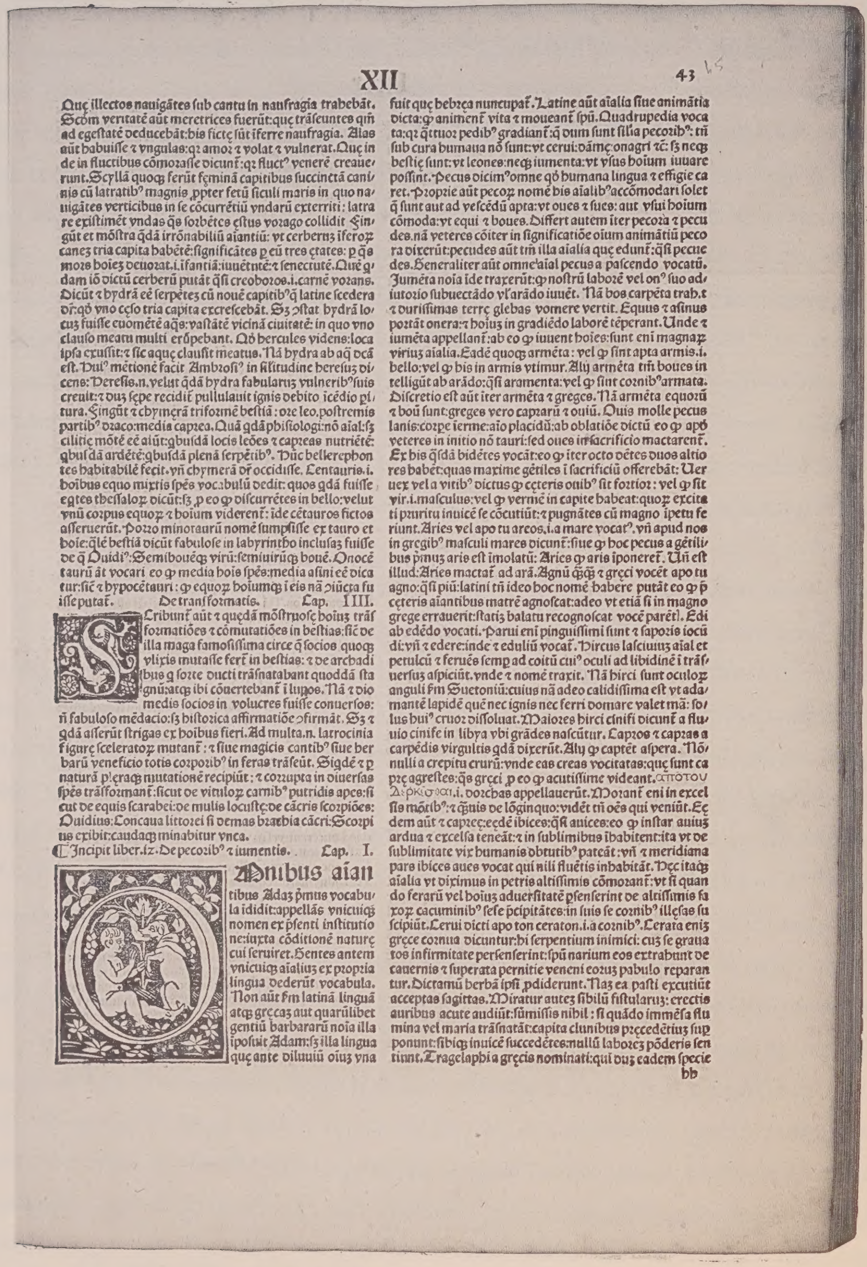
3 *De civitate Dei.* (1486–1487).

of the *City of God*.[28] But his most notable contribution to the history of monsters is to bring the exotic beings from the realm of pagan authors into the foundation of Christian doctrines on the origins of humanity.[29] Although Augustine denies the existence of monstrous peoples, he also ensures that his readers understand their dubious presence in the world within Christian teachings. 'What if God willed to create some races of this sort,' Augustine asks, 'expressly to prevent us from thinking that the wisdom by which he moulds the forms of men was at fault in the case of such monsters as are duly born among us of human parents?'[30] Augustine conceives monsters as indications of God's wisdom and, simultaneously, as prodigies brought to this world by divine power as sources of divination.[31] His theories on the lineage of monsters and views on monsters as prodigies cast enduring influence over the writings of medieval thinkers, most notably in Isidore of Seville's *Etymologies*.[32] As the book went through at least eighteen incunable editions in Latin, Italian, and French, the *City of God* also left a visible imprint on the wonder books of Protestant and Catholic authors circulating at the time of the Reformation.[33]

4 **Saint Isidore of Seville (ca. 560–636).** ***Isidorus ethimologiarum idem de summo bono.*** **Venice: Bonetus Locatellus for Octavianus Scotus, 1493.**

Isidore of Seville reflects on the origins of monsters, portents, omens, and prodigies in book eleven of his *Etymologies*, a large codex integrating palimpsests of readings and writings collected in the seventh century by one of the most prolific thinkers of the medieval world.[34] Isidore extracts most of his catalogue of monstrous peoples and races from Solinus's *Polyhistor*: he locates the cynocephali and the one-eyed cyclopes in India, finds the headless blemmyes in Libya, and reports the long-eared panotians in Scythia.[35] Aside from descriptions of monsters and marvels, he also explains the origins of portents as divine signs of future events. Isidore recollects the particular birth of a composite monster whose animal limbs outlived the human ones, an event which he reports as a sign of the imminent death of the king because the 'worse parts had outlived the better ones.'[36]

Echoing the writings of Augustine, the *Etymologies* conceives monsters, portents, and other strange phenomena as part of the divine natural order. 'Portents are not contrary to nature,' Isidore writes, 'because they are created by divine will, since the nature of everything is the will of the Creator.'[37] From the *Nature of Things* of Thomas of Cantimpré (1201–1272) to the *Nuremberg Chronicles* of Hartmann Schedel (1440–1514), Isidore presented medieval writers of encyclopedias, cosmographies, and natural histories with



XII 43 45

Quę illectos nauigātes ſub cantu in naufragia trahebāt. Scdm veritatē aūt meretrices fuerūt: quę trāſeuntes qm̄ ad egeſtatē deducebāt: his fictę ſūt īferre naufragia. Alas aūt habuiſſe ⁊ vngulas: qꝛ amor ⁊ volat ⁊ vulnerat. Quę inde in fluctibus cōmoraſſe dicunt̄: qꝛ fluctꝰ venerē creauerunt. Scyllā quoqꝫ ferūt fęminā capitibus ſuccinctā caninis cū latratibꝰ magnis ꝓpter fretū ſiculi maris in quo nauigātes verticibus in ſe cōcurrētiū vndarū exterriti: latrare exiſtimēt vndas q̄s ſorbētes ęſtus vorago collidit. Fingūt et mōſtra q̄dā irrōnabiliū aīantiū: vt cerberuʒ īferoꝝ caneʒ tria capita habētē: ſignificātes ꝑ eū tres ętates: ꝑ q̄s mors hoīeʒ deuorat. i. īfantiā: iuuētutē: ⁊ ſenectutē. Quē q̄dam iō dictū cerberū putāt q̄ſi creoboros. i. carnē vorans. Dicūt ⁊ hydrā eē ſerpēteʒ cū nouē capitibꝰ q̄ latine ſcedera dr̄: qđ vno cęſo tria capita excreſcebāt. Sʒ ꝯſtat hydrā locuʒ fuiſſe euomētē aq̄s: vaſtātē vicinā ciuitatē: in quo vno clauſo meatu multi erūpebant. Qđ hercules videns: loca ipſa exuſſit: ⁊ ſic aquę clauſit meatus. Nā hydra ab aq̄ dcā eſt. Huiꝰ mētionē facit Ambroſiꝰ in ſilitudine hereſuʒ dicens: Hereſis. n. velut q̄dā hydra fabularuʒ vulneribꝰ ſuis creuit: ⁊ duʒ ſępe recidit̄ pullulauit ignis debito īcēdio ꝑitura. Fingūt ⁊ chymęrā triformē beſtiā: ore leo, poſtremis partibꝰ draco: media caprea. Quā q̄dā phiſiologi: nō aīal: ſʒ cilicię mōtē eē aiūt: q̄buſdā locis leōes ⁊ capreas nutriētē: q̄buſdā ardētē: q̄buſdā plenā ſerpētibꝰ. Hūc bellerephontes habitabilē fecit. vñ chymerā dr̄ occidiſſe. Centauris. i. hoībus equo mixtis ſpēs vocabulū dedit: quos q̄dā fuiſſe eq̄tes theſſaloꝝ dicūt: ſʒ ꝓ eo ꝙ diſcurrētes in bello: velut vnū corpus equoꝝ ⁊ hoīum viderent̄: īde cētauros fictos aſſeruerūt. Porro minotaurū nomē ſumpſiſſe ex tauro et hoīe: q̄lē beſtiā dicūt fabuloſe in labyrintho incluſaʒ fuiſſe de q̄ Ouidiꝰ: Semibouēqꝫ virū: ſemiuirūqꝫ bouē. Onocētaurū āt vocari eo ꝙ media hoīs ſpēs: media aſini eē dicatur: ſic ⁊ hypocētauri: ꝙ equoꝝ hoīumqꝫ ī eis nā ꝯiūcta fuiſſe putat̄.

De transformatis. Cap. IIII.

SCribunt̄ aūt ⁊ quędā mōſtruoſę hoīuʒ trāſformatiōes ⁊ cōmutatiōes in beſtias: ſic de illa maga famoſiſſima circe q̄ ſocios quoqꝫ vlixis mutaſſe fert̄ in beſtias: ⁊ de archadibus q̄ ſorte ducti trāſnatabant quoddā ſtagnū: atqꝫ ibi cōuertebant̄ ī lupos. Nā ⁊ diomedis ſocios in volucres fuiſſe conuerſos: ñ fabuloſo mēdacio: ſʒ hiſtorica affirmatiōe ꝯfirmāt. Sʒ ⁊ q̄dā aſſerūt ſtrigas ex hoībus fieri. Ad multa. n. latrocinia figurę ſceleratoꝝ mutant̄: ⁊ ſiue magicis cantibꝰ ſiue herbarū veneficio totis corporibꝰ in feras trāſeūt. Siq̄dē ⁊ ꝑ naturā plęraqꝫ mutationē recipiūt: ⁊ corrupta in diuerſas ſpēs trāſformant̄: ſicut de vituloꝝ carnibꝰ putridis apes: ſicut de equis ſcarabei: de mulis locuſtę: de cācris ſcorpiōes: Ouidius: Concaua littorei ſi demas brachia cācri: Scorpius exibit: caudaqꝫ minabitur vnca.

¶ Incipit liber. xii. De pecoribꝰ ⁊ iumentis. Cap. I.

OMnibus aīantibus Adaʒ p̄mus vocabula īdidit: appellās vnicuiqꝫ nomen ex p̄ſenti inſtitutione: iuxta cōditionē naturę cui ſeruiret. Gentes antem vnicuiqꝫ aīaliuʒ ex propria lingua dederūt vocabula. Non aūt ſcḋm latinā linguā atqꝫ gręcaʒ aut quarūlibet gentiū barbararū noīa illa īpoſuit Adam: ſʒ illa lingua quę ante diluuiū oīuʒ vna fuit quę hebręa nuncupat̄. Latine aūt aīalia ſiue animātia dicta: ꝙ animent̄ vita ⁊ moueant̄ ſpū. Quadrupedia vocata: qꝛ q̄ttuor pedibꝰ gradiant̄: q̄ dum ſunt ſilia pecoribꝰ: tñ ſub cura humana nō ſunt: vt cerui: dāmę: onagri ⁊c̄: ſʒ neqꝫ beſtię ſunt: vt leones: neqꝫ iumenta: vt vſus hoīum iuuare poſſint. Pecus dicimꝰ omne qđ humana lingua ⁊ effigie caret. Proprie aūt pecoꝝ nomē his aīalibꝰ accōmodari ſolet q̄ ſunt aut ad veſcēdū apta: vt oues ⁊ ſues: aut vſui hoīum cōmoda: vt equi ⁊ boues. Differt autem īter pecora ⁊ pecudes. nā veteres cōiter in ſignificatiōe oīum animātiū pecora dixerūt: pecudes aūt tm̄ illa aīalia quę edunt̄: q̄ſi pecuedes. Generaliter aūt omne aīal pecus a paſcendo vocatū. Iumēta noīa īde traxerūt: ꝙ noſtrū laborē vel onꝰ ſuo adiutorio ſubuectādo vl' arādo iuuēt. Nā bos carpēta trahit ⁊ duriſſimas terrę glebas vomere vertit. Equus ⁊ aſinus portāt onera: ⁊ hoīuʒ in gradiēdo laborē tēperant. Unde ⁊ iumēta appellant̄: ab eo ꝙ iuuent hoīes: ſunt eñi magnaꝝ viriuʒ aīalia. Eadē quoqꝫ armēta: vel ꝙ ſint apta armis. i. bello: vel ꝙ his in armis vtimur. Aliȷ armēta tm̄ boues intelligūt ab arādo: q̄ſi aramenta: vel ꝙ ſint cornibꝰ armata. Diſcretio eſt aūt īter armēta ⁊ greges. Nā armēta equorū ⁊ boū ſunt: greges vero caprarū ⁊ ouiū. Ouis molle pecus lanis: corpe īerme: aīo placidū: ab oblatiōe dictū eo ꝙ apđ veteres in initio nō tauri: ſed oues in ſacrificio mactarent̄. Ex his q̄ſdā bidētes vocāt: eo ꝙ īter octo dētes duos altiores habēt: quas maxime gētiles ī ſacrificiū offerebāt: Ueruex vel a viribꝰ dictus ꝙ cęteris ouibꝰ ſit fortior: vel ꝙ ſit vir. i. maſculus: vel ꝙ vermē in capite habeat: quoꝝ excitati prurito inuicē ſe cōcutiūt: ⁊ pugnātes cū magno īpetu feriunt. Aries vel apo tu areos. i. a mare vocatꝰ. vñ apud nos in gregibꝰ maſculi mares dicunt̄: ſiue ꝙ hoc pecus a gētilibus p̄muʒ aris eſt īmolatū: Aries ꝙ aris īponeret̄. Uñ eſt illud: Aries mactat̄ ad arā. Agnū q̄qꝫ ⁊ gręci vocēt apo tu agno: q̄ſi piū: latini tñ ideo hoc nomē habere putāt eo ꝙ p̄ cęteris aīantibus matrē agnoſcat: adeo vt etiā ſi in magno grege errauerit: ſtatiʒ balatu recognoſcat vocē parētl. Edi ab edēdo vocati. Parui eñi pinguiſſimi ſunt ⁊ ſaporis iocūdi: vñ ⁊ edere: inde ⁊ eduliū vocat̄. Hircus laſciuuʒ aīal et petulcū ⁊ feruēs ſemꝑ ad coitū cuiꝰ oculi ad libidinē ī trāſuerſuʒ aſpiciūt. vnde ⁊ nomē traxit. Nā hirci ſunt oculoꝝ anguli ſcḋm Suetoniū: cuius nā adeo calidiſſima eſt vt adamantē lapidē quē nec ignis nec ferri domare valet mā: ſolus huiꝰ cruor diſſoluat. Maiores hirci cinifi dicunt̄ a fluuio cinife in libya vbi grādes naſcūtur. Capros ⁊ capras a carpēdis virgultis q̄dā dixerūt. Aliȷ ꝙ captēt aſpera. Nōnulli a crepitu crurū: vnde eas creas vocitatas: quę ſunt capręagreſtes: q̄s gręci ꝓ eo ꝙ acutiſſime videant. απότου Δερκισθαι. i. dorchas appellauerūt. Morant̄ eñi in excelſis mōtibꝰ: ⁊ q̄uis de lōginquo: vidēt tñ oēs qui veniūt. Eędem aūt ⁊ capreę: eędē ibices: q̄ſi auices: eo ꝙ inſtar auiuʒ ardua ⁊ excelſa teneāt: ⁊ in ſublimibus īhabitent: ita vt de ſublimitate vix humanis obtutibꝰ pateāt: vñ ⁊ meridiana pars ibices aues vocat qui nili fluētis inhabitāt. Hęc itaqꝫ aīalia vt diximus in petris altiſſimis cōmorant̄: vt ſi quando ferarū vel hoīuʒ aduerſitatē p̄ſenſerint de altiſſimis ſaxoꝝ cacuminibꝰ ſeſe p̄cipitātes: in ſuis ſe cornibꝰ illęſas ſuſcipiūt. Cerui dicti apo ton ceraton. i. a cornibꝰ. Cerata eniʒ gręce cornua dicuntur: hi ſerpentium inimici: cuʒ ſe grauatos infirmitate perſenſerint: ſpū narium eos extrahunt de cauernis ⁊ ſuperata pernitie veneni coruʒ pabulo reparantur. Dictamū herbā ipſi ꝓdiderunt. Naʒ ea paſti excutiūt acceptas ſagittas. Miratur auteʒ ſibilū fiſtularuʒ: erectis auribus acute audiūt: ſūmiſſis nihil: ſi quādo immēſa flumina vel maria trāſnatāt: capita clunibus p̄cedētiuʒ ſupponunt: ſibiqꝫ inuicē ſuccedētes: nullū laboreʒ pōderis ſentiunt. Tragelaphi a gręcis nominati: qui duʒ eadem ſpecie

bb

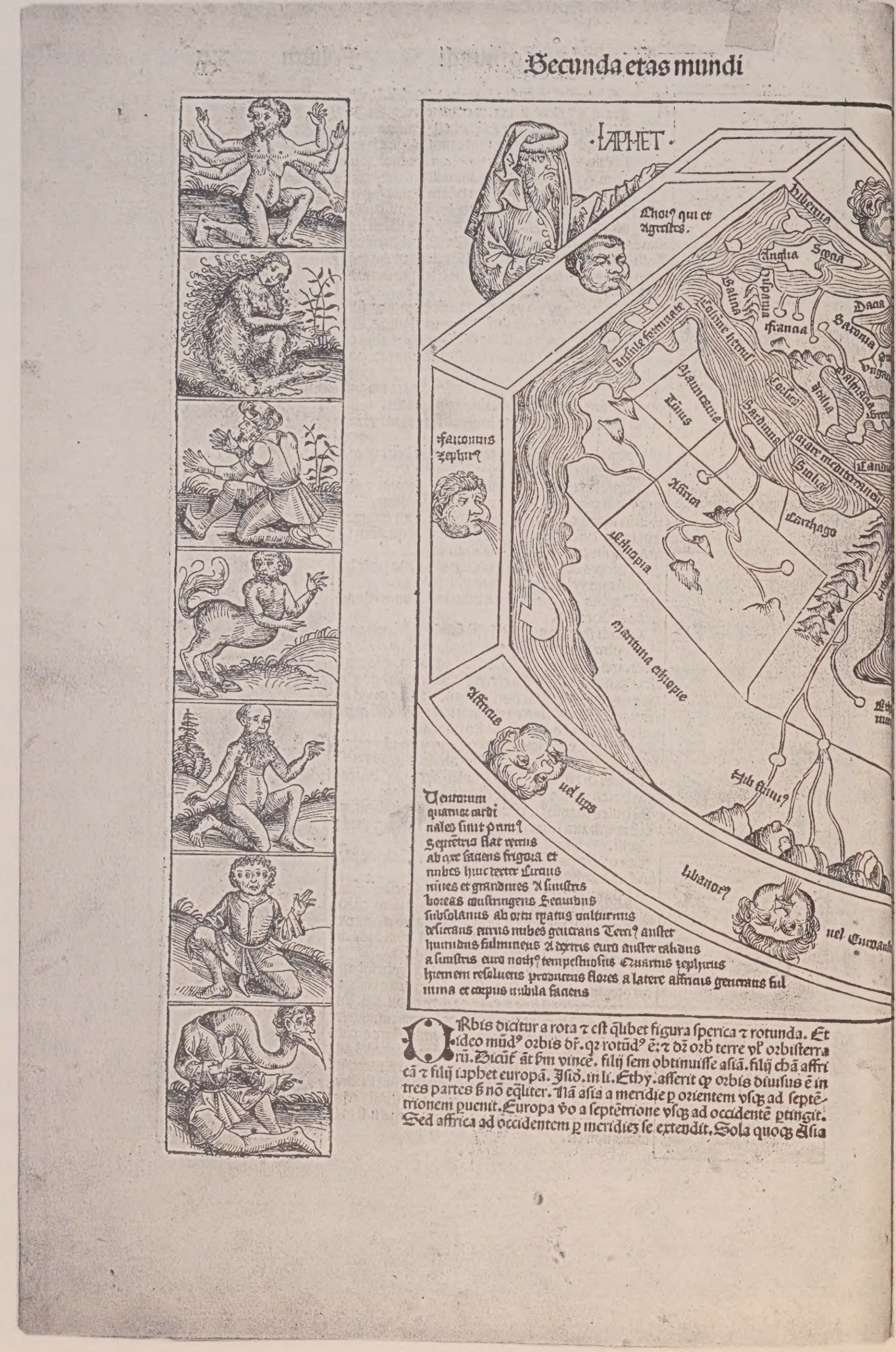
4 *Isidorus ethimologiarum idem de summo bono.* (1493).

a framework to explore the origins and nature of monsters within the doctrines of Christianity.[38] Almost a thousand complete or partial manuscript copies of the *Etymologies* survive in the present, many of which circulated for centuries amongst most centres of learning in medieval Europe.[39] The German printer Johann Zainer (d. 1478) produced the first edition at Augsburg in 1472, notable for containing the earliest known printed world map.[40] Among the eleven incunable editions, this Venetian imprint from 1497 displays the same printer's device of Octavianus Scotus (d. 1498) found in the 1486-1487 edition of the *De civitate Dei*, which is the first known printing by this book merchant who, in association with the Franciscan friar Bonetus Locatellus (1486-1510), found success printing music, as well as philosophy and classical works in Latin translation.[41]

5 Hartmann Schedel (1440–1514). *Liber chronicarum*. Nuremberg: Anton Koberger, 12 July 1493.

In the tradition of the '*imago mundi*' genre of chronicles, the *Nuremberg Chronicle* arranges the history of the world into the six established biblical ages, adding significant contributions to the history of cities and nations until the year 1493.[42] When the Nuremberg city physician and humanist scholar Hartmann Schedel joined this ambitious project in 1490, he had access to a personal library of 370 manuscripts and more than six hundred printed books.[43] Schedel offers almost no original content as an author and many of his sources can be traced to just a few Italian writers.[44] He transcribes most of his source material from the *Supplementum chronicarum* by Giacomo Filippo Foresti (1434–1520), while also citing from the *Historia Bohemica* by Enea Silvio Piccolomini or Pius II (1405–1464).[45] What makes the *Nuremberg Chronicle* a truly innovative book is the vision of its financiers, artists, and printers who sought to create an image of the world through the use of graphic and printing standards unparalleled in books of the fifteenth century.[46]

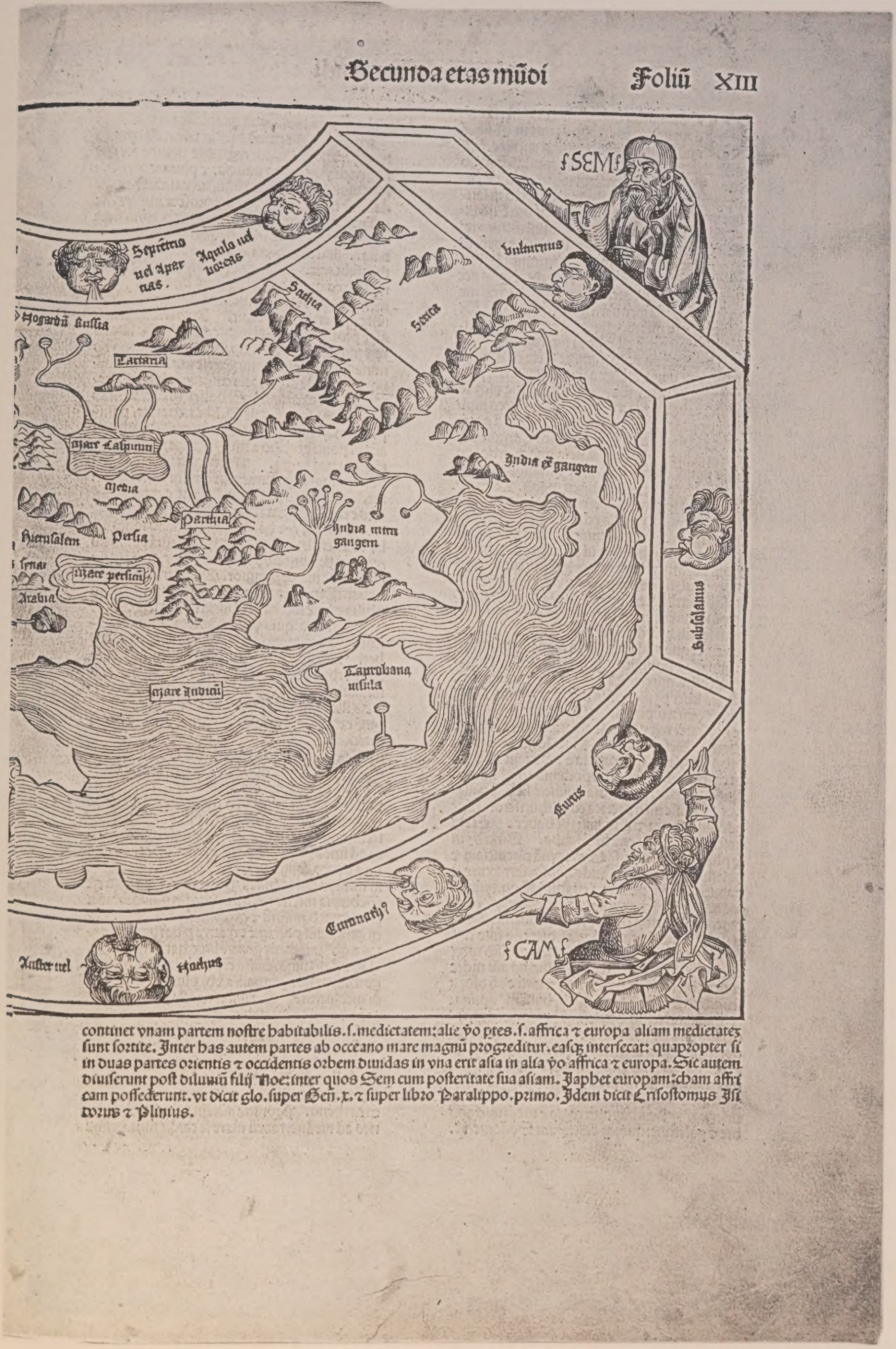
The first Latin edition of the *Nuremberg Chronicle* was published in July of 1493 after several years of production.[47] The printer Anton Koberger (ca. 1440-1513), along with the artists Wilhelm Pleydenwurff (ca. 1450-1494) and Michael Wolgemut (1434-1519), are responsible for crafting one of the masterpieces of graphic and printing arts from the early era of European printing.[48] The *Nuremberg Chronicle* profusely illustrates the history of the world into six hundred pages of text accompanied by more than eighteen hundred woodcuts, many of which provide early views of


·IAPHET·
Chorus qui et agrestes.
Hibernia
Anglia
Scocia
Dacia
Saxonia
Francia
Hispania
Gallia
Ytalia
Dalmacia
Ungaria
Corsica
Sardinia
Sicilia
Mare mediterraneum
Insule fortunate
Colūne herculis
Mauritania
Tingis
Affrica
Carthago
Ethiopia
Maritima ethiopie
Favonius zephirus
Affricus
uel lips
Libanoc?
uel Euroauster

Secunda etas mundi

Ventorum
quatuor cardi
nales sunt prim⁹
Septētrio flat vertis
ab axe faciens frigora et
nubes huic dexter Circius
nives et grandines A sinistris
boreas constringens Secundus
subsolanus ab ortu spirans vulturnus
desiccans eurus nubes generans Terci⁹ auster
humidus fulmineus A dextris euro auster calidus
a sinistris euro noth⁹ tempestuosus Quartus zephyrus
hiemem resoluens producens flores a latere affricus generans ful
mina et corpus nubila faciens

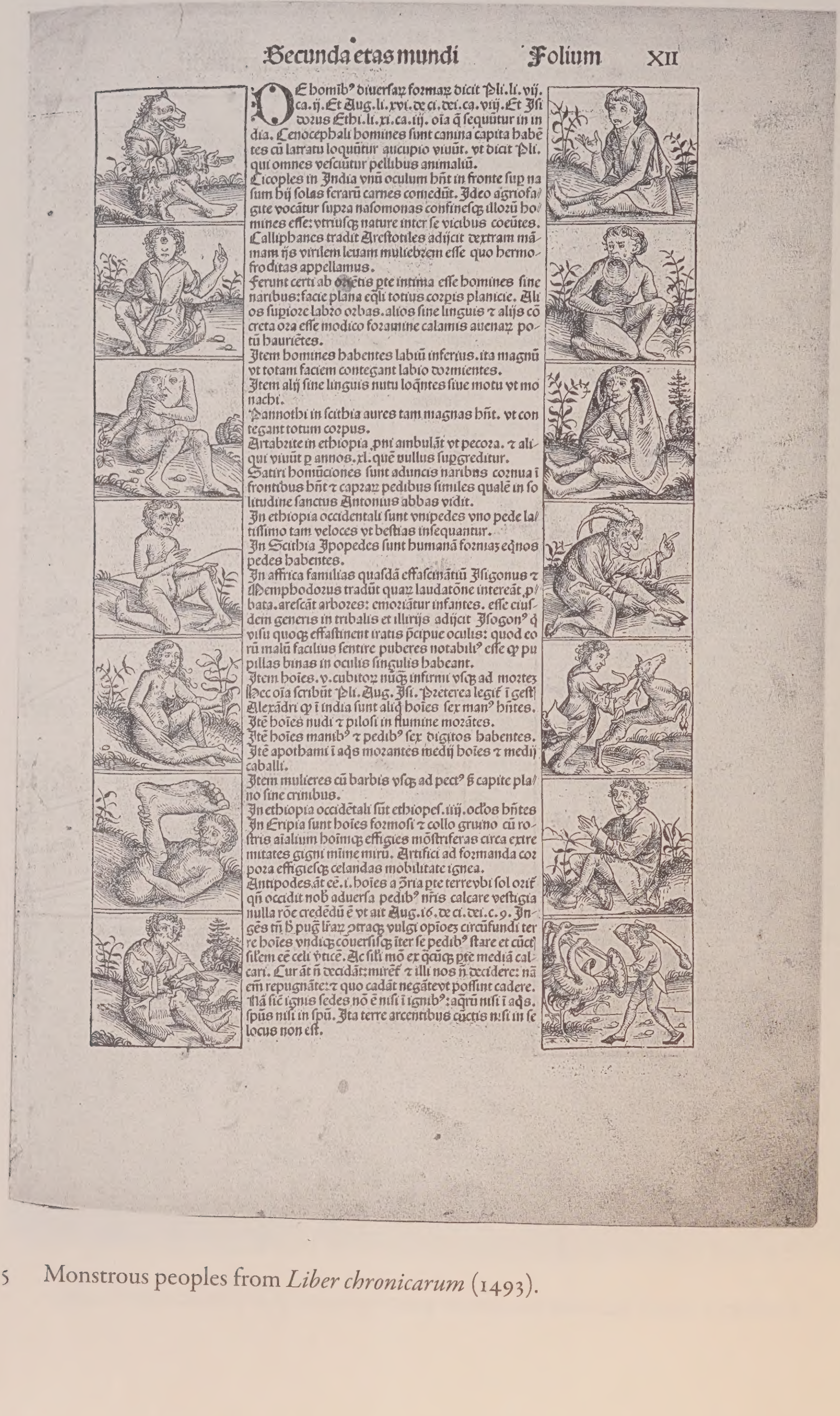
Orbis dicitur a rota ꝛ est qlibet figura sperica ꝛ rotunda. Et ideo mūd⁹ orbis dr̄. qꝛ rotūd⁹ ē: ꝛ dr̄ orb terre vl' orbisterrarū. Dicitur āt ƀm vince. filij sem obtinuisse asiā. filij chā affricā ꝛ filij iaphet europā. Isid. in li. Ethy. asserit ꝙ orbis diuisus ē in tres partes ƀ nō eqliter. Nā asia a meridie ꝑ orientem vſqꝫ ad septētrionem ꝑuenit. Europa vo a septētrione vſqꝫ ad occidentē ꝑtingit. Sed affrica ad occidentem ꝑ meridiem ſe extendit. Sola quoqꝫ Asia


ſSEMſ
Septētrio uel Aparnas.
Aquilo uel voreas
Vulturnus
Sithia
Serica
Nogardū Russia
Tartaria
Mare Caspium
Media
Parthia
Hierusalem
Persia
Sinai
Mare persicū
Arabia
India intra gangem
India extra gangem
Subsolanus
Taprobana insula
Mare Indicū
Eurus
Euronoth?
Auster uel
Nothus
ſCAMſ

Secunda etas mūdi Foliū XIII

continet vnam partem noſtre habitabilis.ſ.medietatem; alie vº ptes.ſ.affrica ⁊ europa aliam medietatez ſunt ſortite. Inter has autem partes ab occeano mare magnū progreditur.eaſqꝫ interſecat: quapropter ſi in duas partes orientis ⁊ occidentis orbem diuidas in vna erit aſia in alia vº affrica ⁊ europa. Sic autem diuiſerunt poſt diluuiū filij Noe: inter quos Sem cum poſteritate ſua aſiam. Japhet europam: cham affricam poſſederunt. vt dicit glo. ſuper Gen.x. ⁊ ſuper libro Paralippo. primo. Idem dicit Criſoſtomus Iſidorus ⁊ Plinius.

5 Ptolemy's world map and monstrous peoples from *Liber chronicarum* (1493).



Secunda etas mundi Folium XII

De hominibꝰ diuerſaꝝ formaꝝ dicit Pli.li.vij.ca.ij. Et Aug.li.xvi.de ci.dei.ca.viij. Et Iſidorus Ethi.li.xi.ca.iij. oīa q̄ ſequūtur in india. Cenocephali homines ſunt canina capita habētes cū latratu loquūtur aucupio viuūt. vt dicit Pli. qui omnes veſciūtur pellibus animaliū.

Cicoples in India vnū oculum hn̄t in fronte ſuꝑ naſum hij ſolas ferarū carnes comedūt. Ideo agriofagite vocātur ſupra naſomonas confineſqꝫ illorū homines eſſe: vtriuſqꝫ nature inter ſe vicibus coeūtes.

Calliphanes tradit Areſtotiles adijcit dextram māmam ijs virilem leuam muliebrem eſſe quo hermofroditas appellamus.

Ferunt certi ab orīetis ꝑte intima eſſe homines ſine naribus: facie plana eq̄li totius corꝑis planicie. Alios ſuꝑiore labro orbas. alios ſine linguis ⁊ alijs cōcreta ora eſſe modico foramine calamis auenaꝝ potū haurīetes.

Item homines habentes labiū inferius. ita magnū vt totam faciem contegant labio dormientes.

Item alij ſine linguis nutu loq̄ntes ſiue motu vt monachi.

Pannothi in ſcithia aures tam magnas hn̄t. vt contegant totum corpus.

Artabrite in ethiopia ꝓni ambulāt vt pecora. ⁊ aliqui viuūt ꝑ annos.xl. quē nullus ſuꝑgreditur.

Satiri homūciones ſunt aduncis naribus cornua ī frontibus hn̄t ⁊ capraꝝ pedibus ſimiles qualē in ſolitudine ſanctus Antonius abbas vidit.

In ethiopia occidentali ſunt vnipedes vno pede latiſſimo tam veloces vt beſtias inſequantur.

In Scithia Ipopedes ſunt humanā formaꝫ eq̄nos pedes habentes.

In affrica familias quaſdā effaſcinātiū Iſigonus ⁊ Memphodorus tradūt quaꝝ laudatōne intereāt ꝓbata. areſcāt arbores: emoriātur infantes. eſſe eiuſdem generis in tribalis et illirijs adijcit Iſogonꝰ q̄ viſu quoqꝫ effaſtinent iratis ꝑcipue oculis: quod eorū malū facilius ſentire puberes notabilꝰ eſſe ꝙ pupillas binas in oculis ſingulis habeant.

Item hoīes.v.cubitoꝝ nūqꝫ infirmi vſqꝫ ad morteꝫ.

Hec oīa ſcribūt Pli. Aug. Iſi. Preterea legit̄ ī geſtꝭ Alexādri ꝙ ī india ſunt aliq̄ hoīes ſex manꝰ hn̄tes.

Itē hoīes nudi ⁊ piloſi in flumine morātes.

Itē hoīes manibꝰ ⁊ pedibꝰ ſex digitos habentes.

Itē apothami ī aq̄s morantes medij hoīes ⁊ medij caballi.

Item mulieres cū barbis vſqꝫ ad pectꝰ ſ̄ capite plano ſine crinibus.

In ethiopia occidētali ſūt ethiopeſ.iiij.oclos hn̄tes

In Eripia ſunt hoīes formoſi ⁊ collo gruino cū roſtris aīalium hoīmqꝫ effigies mōſtriferas circa extremitates gigni mīme miru. Artifici ad formanda corpora effigieſqꝫ celandas mobilitate ignea.

Antipodes āt eē.i. hoīes a ꝯtraria ꝑte terre vbi ſol orit̄ qn̄ occidit nob̄ aduerſa pedibꝰ nr̄is calcare veſtigia nulla rōe credēdū ē vt ait Aug.16.de ci.dei.c.9. Ingēs tn̄ h̄ pug̃ lr̄aꝝ ꝯtraqꝫ vulgi opioēꝫ circūfundi terre hoīes vndiqꝫ cōuerſiſqꝫ iter ſe pedibꝰ ſtare et cūctꝭ ſilem eē celi v̾ticē. Ac ſili mō ex q̄ūqꝫ ꝑte mediā calcari. Cur āt n̄ decidāt: mireꝛ ⁊ illi nos n̄ decidere: nā eē repugnāte: ⁊ quo cadāt negāte vt poſſint cadere. Nā ſic ignis ſedes nō ē niſi ī ignibꝰ: aq̄rū niſi ī aq̄s. ſpūs niſi in ſpū. Ita terre arcentibus cūctis niſi in ſe locus non eſt.

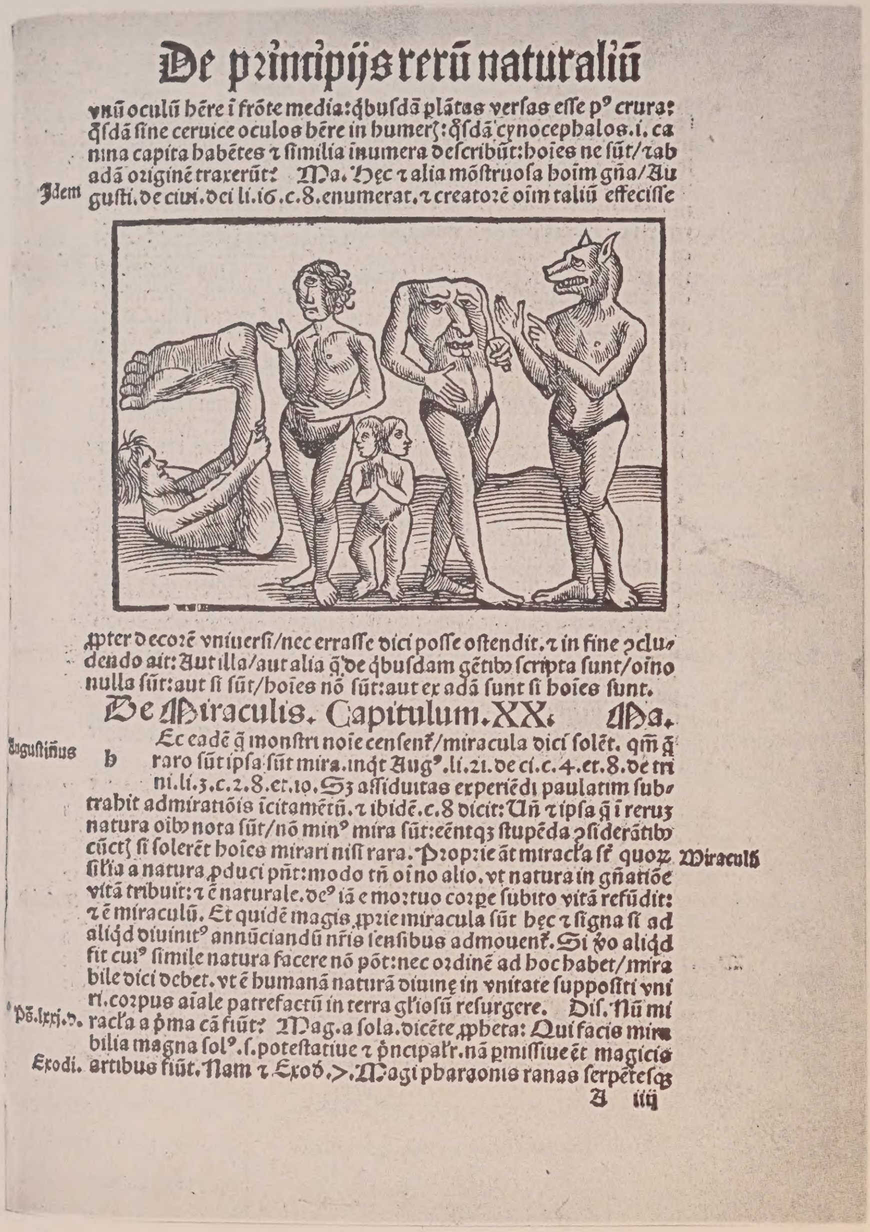
5 Monstrous peoples from *Liber chronicarum* (1493).

historical and biblical events in print as well as images of medieval towns and portraits of important historical figures.[49]

In the age of the Great Flood, Schedel's taxonomy of 'men of diverse forms' is illustrated by arguably the most iconographic pages in the history of monsters in early printed books. Excerpted from Aristotle, Pliny, Augustine, and Isidore, Schedel brings his brief accounts of monstrous peoples to life on paper by way of three sets of marginal woodcuts located in both the original Latin and the German edition of 1493. Although earlier depictions of the cynocephali, blemmyae, sciapods, and other monstrous peoples had appeared in the scarce printed versions of the *Book of Nature* (1475) of Conrad of Megenberg (1309-1374) and the *Travels* (1482) of Sir John Mandeville, the representations of monsters in both text and image in the *Nuremberg Chronicle* had significant influence in the sixteenth century, most notably in the *Chronica* (1531) of Sebastian Franck (1499-ca. 1543) and the *Cosmographia universalis* (1544) of Sebastian Münster (1489-1552).[50] The *Nuremberg Chronicle* continues to inform modern investigations on the topic of monsters partly because a considerable number of the original 2,500 printed volumes of the Latin and German editions survive to this day.

6 Gregor Reisch (1467–1525). *Margarita philosophica*. Basel: Johann Schott, 1508. Gregor Reisch, a German Carthusian humanist author, invested more than ten years in the preparation of this book intended for young students as an 'epitome of the whole of philosophy.'[51] First published by Johann Schott (1477–1548) in 1503, *Margarita philosophica* quickly became a popular illustrated compendium of all the branches of knowledge that students in the sixteenth century were expected to acquire as part of their education.[52] Schott and several printers issued at least twelve editions between 1503 and 1600 to meet the high demand for this readable epitome which introduces philosophical ideas as dialogues between masters and students through the course of twelve books, each one lecturing readers on grammar, dialectic, rhetoric, arithmetic, music, geometry, astronomy, natural philosophy, psychology, logic, and ethics.[53]

In chapters nineteen and twenty of the eighth book, 'On the principles of natural things,' Reisch explores the notions of monstrous peoples according to Augustinian principles. 'What about the various monsters which histories record as existing in diverse parts of the world, but especially in India?' asks the student, to which the master responds, 'these and other monstrous kinds of men Augustine listed in book 16 of *On the City of*



De pꝛincipijs rerū naturaliū

vnū oculū hēre ī frōte media: qbuſdā plātas verſas eſſe pꝰ crura: qſdā ſine ceruice oculos hēre in humerꝫ: qſdā cynocephalos.i. canina capita habētes ⁊ ſimilia inumera deſcribūt: hoīes ne ſūt/⁊ ab adā originē traxerūt? Ma. Hec ⁊ alia mōſtruoſa hoīm gn̄a/Auguſti. de ciui. dei li.16.c.8. enumerat. ⁊ creatorē oīm taliū effeciſſe

Idem

ꝓpter decorē vniuerſi/nec erraſſe dici poſſe oſtendit. ⁊ in fine ꝯcludendo ait: Aut illa/aut alia q̄ de qbuſdam gētibꝫ ſcripta ſunt/oīno nulla ſūt: aut ſi ſūt/hoīes nō ſūt: aut ex adā ſunt ſi hoīes ſunt.

De Miraculis. Capitulum. XX.

Ma.

Auguſtinus b

Ec eadē q̄ monſtri noīe cenſent/miracula dici ſolēt. qm̄ q̄ raro ſūt ipſa ſūt mira. inqt Augꝰ.li.21. de ci.c.4. et.8. de trini.li.3.c.2.8. et.10. Sꝫ aſſiduitas experiēdi paulatim ſubtrahit admiratiōis īcitamētū. ⁊ ibidē.c.8 dicit: Vn̄ ⁊ ipſa q̄ ī rerū natura oībꝫ nota ſūt/nō minꝰ mira ſūt: eēntq; ſtupēda ꝯſiderātibꝫ cūctꝫ ſi ſolerēt hoīes mirari niſi rara. Pꝛopꝛie āt miracl'a ſt quoꝝ ſilia a natura ꝓduci pn̄t: modo tn̄ oīno alio. vt natura in gn̄atiōe vitā tribuit: ⁊ ē naturale. deꝰ iā e moꝛtuo coꝛpe ſubito vitā refūdit: ⁊ ē miraculū. Et quidē magis ꝓpꝛie miracula ſūt hec ⁊ ſigna ſi ad aliqd diuinitꝰ annūciandū nr̄is ſenſibus admouent. Si ꝟo aliqd fit cuiꝰ ſimile natura facere nō pōt: nec oꝛdinē ad hoc habet/mirabile dici debet. vt ē humanā naturā diuine in vnitate ſuppoſiti vniri. coꝛpus aīale patrefactū in terra gl'ioſū reſurgere. Diſ. Nū miracl'a a pma cā fiūt? Mag. a ſola. dicēte ꝓpheta: Qui facis mirabilia magna ſolꝰ. ſ. poteſtatiue ⁊ pncipal'r. nā pmiſſiue ēt magicis artibus fiūt. Nam ⁊ Exod.7. Magi pharaonis ranas ſerpēteſq;

Miraculū

Ps.lxxi.b.

Exodi.

A iiij

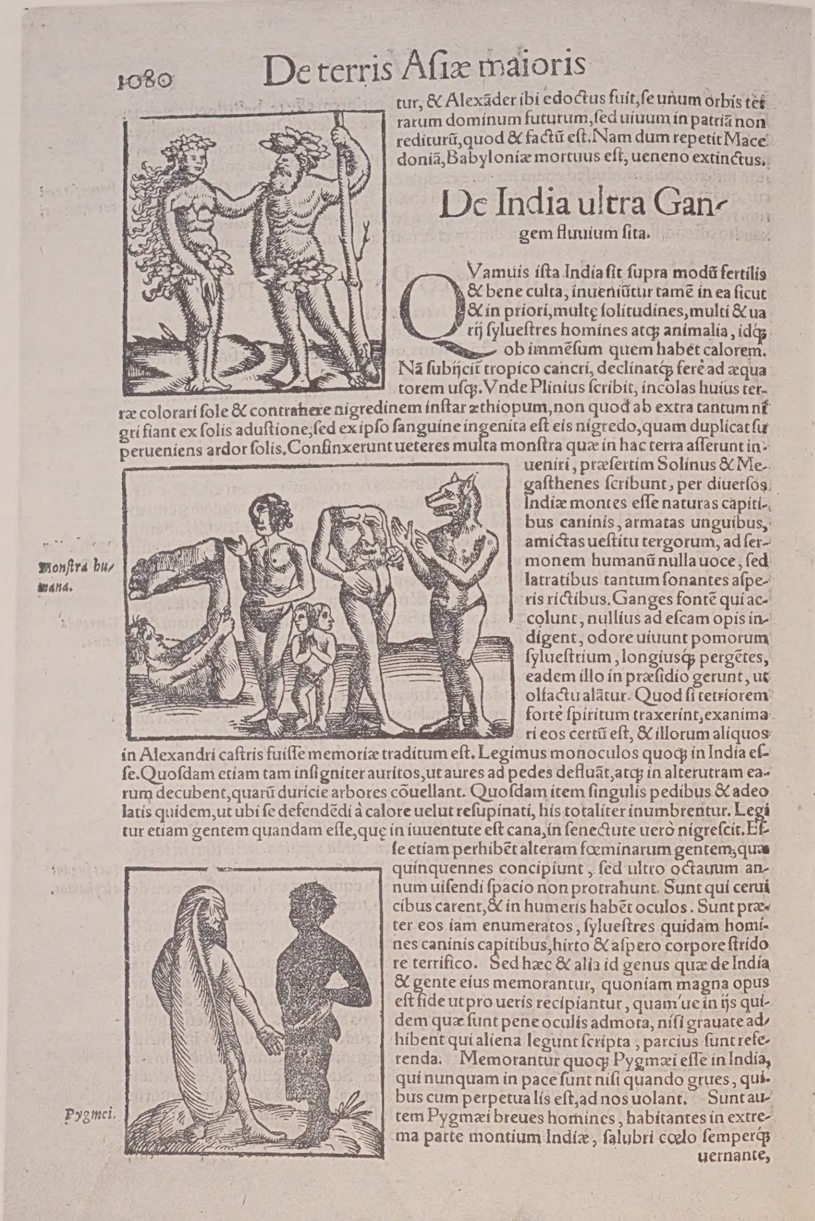
6 Monstrous peoples from *Margarita philosophica* (1508).

God, and showed that the Creator had made all such things according to the beauty of the world and that He cannot be said to have erred.'[54] The dialogue, illustrated by a woodcut depicting five monstrous creatures, deals with the origins of monsters, miracles, and the meaning of monstrosity in light of natural philosophy. As *Margarita philosophica* reinforces Augustine's ideas on monsters as messengers and evidence of God's wisdom, generations of students in Germany and other parts of Europe made this book one of the earliest and most popular examples of a textbook that follows the curriculum of universities in the sixteenth century.[55]

7 **Sebastian Münster (1489–1552).** ***Cosmographia universalis.*** **Basel: Heinrich Petri, 1559.**

The German geographer and polymath Sebastian Münster devoted eighteen years of his life towards the publication of the first edition of his *Cosmographia* in 1544, an illustrated encyclopedia of universal knowledge and a source of enduring influence for readers of the sixteenth and seventeenth centuries.[56] The *Cosmographia* stands as a massive collection of world chronicles presented in the form of a historical and geographical peregrination through the German lands and the rest of the world across time.[57] As more information became available, Münster and his editors added new content to the *Cosmographia* in response to the demands of eager readers who encountered a volume that gradually increased in size from 670 to about 1780 pages in a period of eighty-four years.[58] Encompassing everything from travel information about European cities to the nature of fantastical beasts, Münster incorporates an impressive range of topics assembled from cartographic information, empirical evidence, regional descriptions, and general content for a book that became the most popular of its kind.[59]

Münster takes a critical stance on the existence of marvels and monstrous peoples.[60] He cites Pliny, Solinus, and Mela for his accounts of '*monstra humana*' in India and Africa, authors whom he questions for fabricating monsters only found in the pages of books. 'The ancients have devised,' he writes, 'peculiar monsters which are supposed to exist in India but there is nobody here who has ever seen these marvels.'[61] Despite his incredulous views and peripheral coverage on the subject, generations of readers and authors have been drawn to the woodcuts of monstrous peoples and prodigies portrayed in the *Cosmographia*.[62] The version of the monsters in the *Heydenweldt* (1554) of Johann Herold (1514–1567) is the same as Münster's, while the *Liber de prodigiis* (1552) of Conrad



1080 De terris Aſiæ maioris

tur, & Alexãder ibi edoctus fuit, ſe unum orbis terrarum dominum futurum, ſed uiuum in patriã non rediturũ, quod & factũ eſt. Nam dum repetit Macedoniã, Babyloniæ mortuus eſt, ueneno extinctus.

De India ultra Gangem fluuium ſita.

Qvamuis iſta India ſit ſupra modũ fertilis & bene culta, inueniũtur tamẽ in ea ſicut & in priori, multę ſolitudines, multi & uarĳ ſylueſtres homines atq; animalia, idq; ob immẽſum quem habet calorem. Nã ſubĳcit tropico cancri, declinatq; ferè ad æquatorem uſq;. Vnde Plinius ſcribit, incolas huius terræ colorari ſole & contrahere nigredinem inſtar æthiopum, non quod ab extra tantum nigri fiant ex ſolis aduſtione, ſed ex ipſo ſanguine ingenita eſt eis nigredo, quam duplicat ſuperueniens ardor ſolis. Confinxerunt ueteres multa monſtra quæ in hac terra aſſerunt inueniri, præſertim Solinus & Megaſthenes ſcribunt, per diuerſos Indiæ montes eſſe naturas capitibus caninis, armatas unguibus, amictas ueſtitu tergorum, ad ſermonem humanũ nulla uoce, ſed latratibus tantum ſonantes aſperis rictibus. Ganges fontẽ qui accolunt, nullius ad eſcam opis indigent, odore uiuunt pomorum ſylueſtrium, longiusq; pergẽtes, eadem illo in præſidio gerunt, ut olfactu alãtur. Quod ſi tetriorem fortè ſpiritum traxerint, exanimari eos certũ eſt, & illorum aliquos in Alexandri caſtris fuiſſe memoriæ traditum eſt. Legimus monoculos quoq; in India eſſe. Quoſdam etiam tam inſigniter auritos, ut aures ad pedes defluãt, atq; in alterutram earum decubent, quarũ duricie arbores cõuellant. Quoſdam item ſingulis pedibus & adeo latis quidem, ut ubi ſe defendẽdi à calore uelut reſupinati, his totaliter inumbrentur. Legitur etiam gentem quandam eſſe, quę in iuuentute eſt cana, in ſenectute uerò nigreſcit. Eſſe etiam perhibẽt alteram fœminarum gentem, quæ quinquennes concipiunt, ſed ultro octauum annum uiſendi ſpacio non protrahunt. Sunt qui ceruicibus carent, & in humeris habẽt oculos. Sunt præter eos iam enumeratos, ſylueſtres quidam homines caninis capitibus, hirto & aſpero corpore ſtridore terrifico. Sed hæc & alia id genus quæ de India & gente eius memorantur, quoniam magna opus eſt fide ut pro ueris recipiantur, quam'ue in ĳs quidem quæ ſunt pene oculis admota, niſi grauate adhibent qui aliena legunt ſcripta, parcius ſunt referenda. Memorantur quoq; Pygmæi eſſe in India, qui nunquam in pace ſunt niſi quando grues, quibus cum perpetua lis eſt, ad nos uolant. Sunt autem Pygmæi breues homines, habitantes in extrema parte montium Indiæ, ſalubri cœlo ſemperq; uernante,

Monſtra humana.

Pygmei.

7 ‘Monstra humana’ from *Cosmographia universalis* (1559).

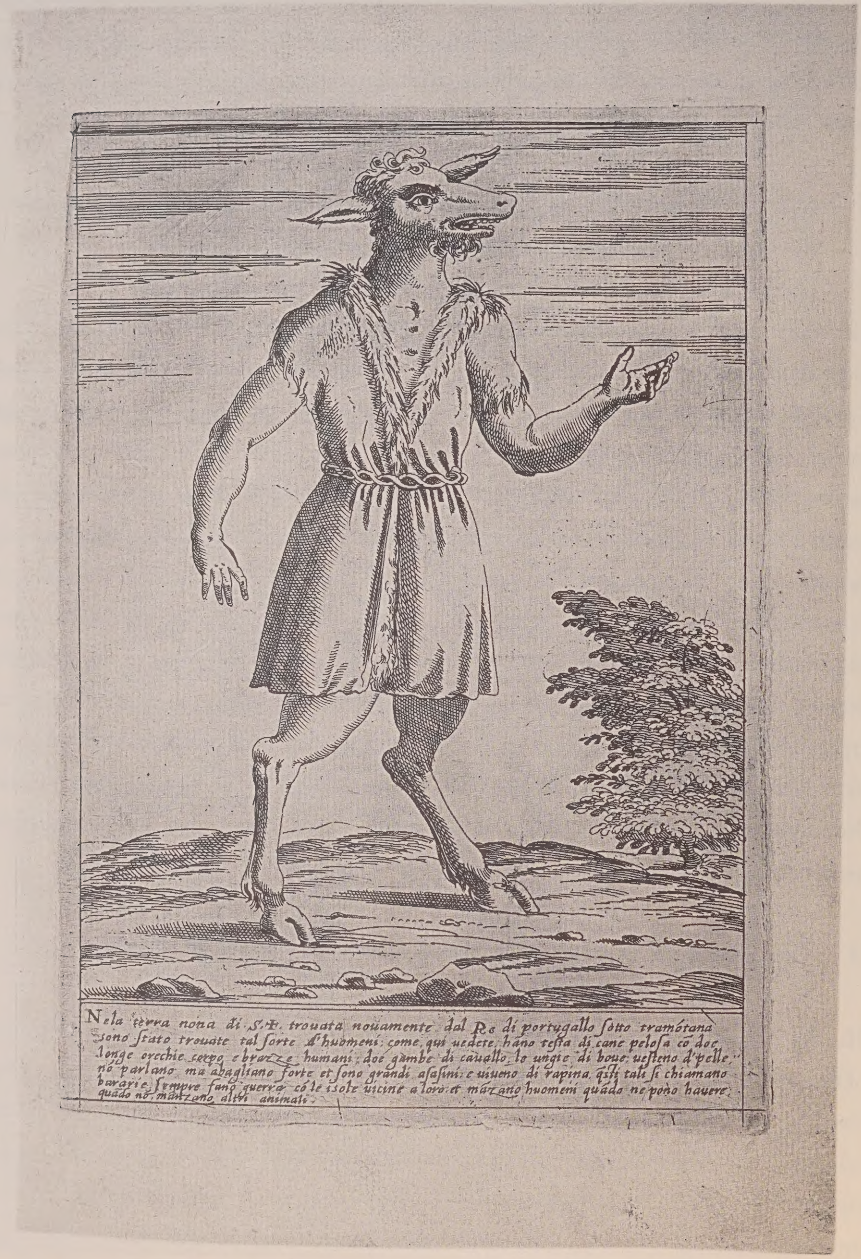
Lycosthenes (1518–1561) borrows some of its illustrations from the *Cosmographia* and the *Nuremberg Chronicle* as well.[63] Prior to the author's death in 1552, eight editions of the *Cosmographia* had been printed, followed by a total of thirty-five editions by 1628. This edition of 1559 contains the same gathering of monstrous peoples as the woodcuts present in the definitive Latin edition of 1550, the last to be edited by Münster.[64]

8 Giavanni Battista de' Cavalieri (1525–1601). *Opera nelaquale vie molti mostri de tutte le parti del mondo antichi et moderni con le dechiarationi a ciascheduno fine al presento anno 1585*. Rome: By the author, 1585.

The Italian engraver and publisher Giovanni Battista de' Cavalieri produced one of the most remarkable and rarest illustrated books on monsters of the early modern period. Cavalieri began his career in Rome in the 1560s where he published prints and several works on Roman antiquities and religious subjects, including his *Romanorvm imperatorvm effigies* (1583) and *Ecclesiæ anglicanæ trophæa* (1584).[65] His *Opera nelaquale vie molti mostri de tutte le parti del mondo* was published in 1585 as a suite of engravings containing twenty plates of monstrous peoples, animals, and two contemporary reports of monstrous births. Each plate is accompanied by brief information on the location, behaviour, and main physical features of the monsters. The book portrays, for example, the dog-headed peoples as 'killers' who eat animals and humans, the 'bestial' one-eyed creatures with no neck and short legs, as well as the peculiar 'bird' peoples with long necks like storks.[66] Even though the album only survives today in five complete copies, some of the engravings would eventually reach wider audiences as part of the illustrated supplement to *Delle relationi universali* (1617) by Giovanni Botero (1544–1617).[67]

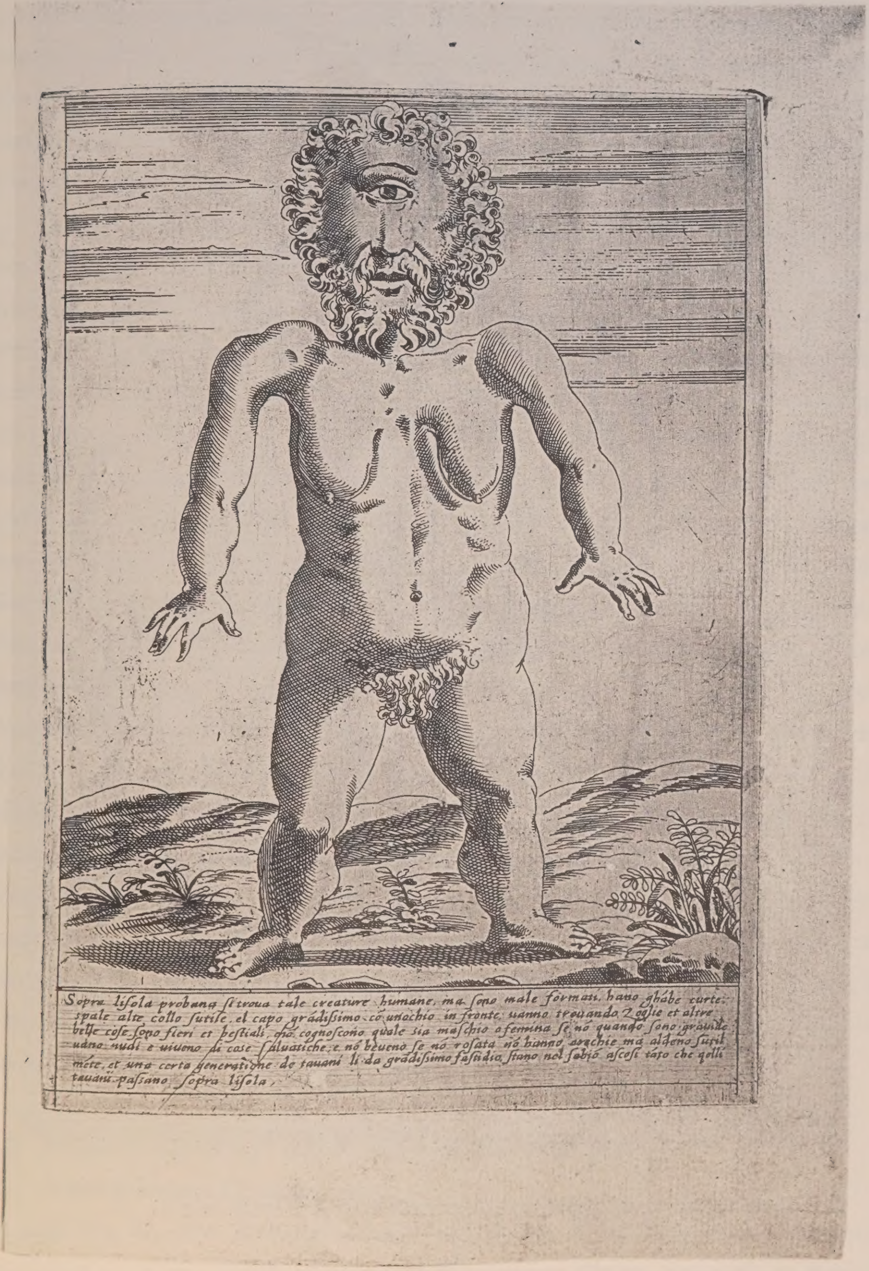
9 Giovanni Botero (1544–1617). *Aggivnta alla quarta parte dell'Indie*. Venice: Alessandro de' Vecchi, 1623.

The *Relationi universali* by the Italian geographer Giovanni Botero compiles descriptions of Europe, Africa, Asia, and parts of the New World taken from early encyclopedias, first-hand sources of travel literature, as well as contemporary accounts of travellers and missionaries.[68] This popular 'political cosmography' starts with a geographical exploration of the continents and islands of the globe; it then covers the histories of the most important rulers and states; it follows with descriptions of the peoples of the world, their beliefs and habits; and it culminates with commentaries on the New World and the intro-



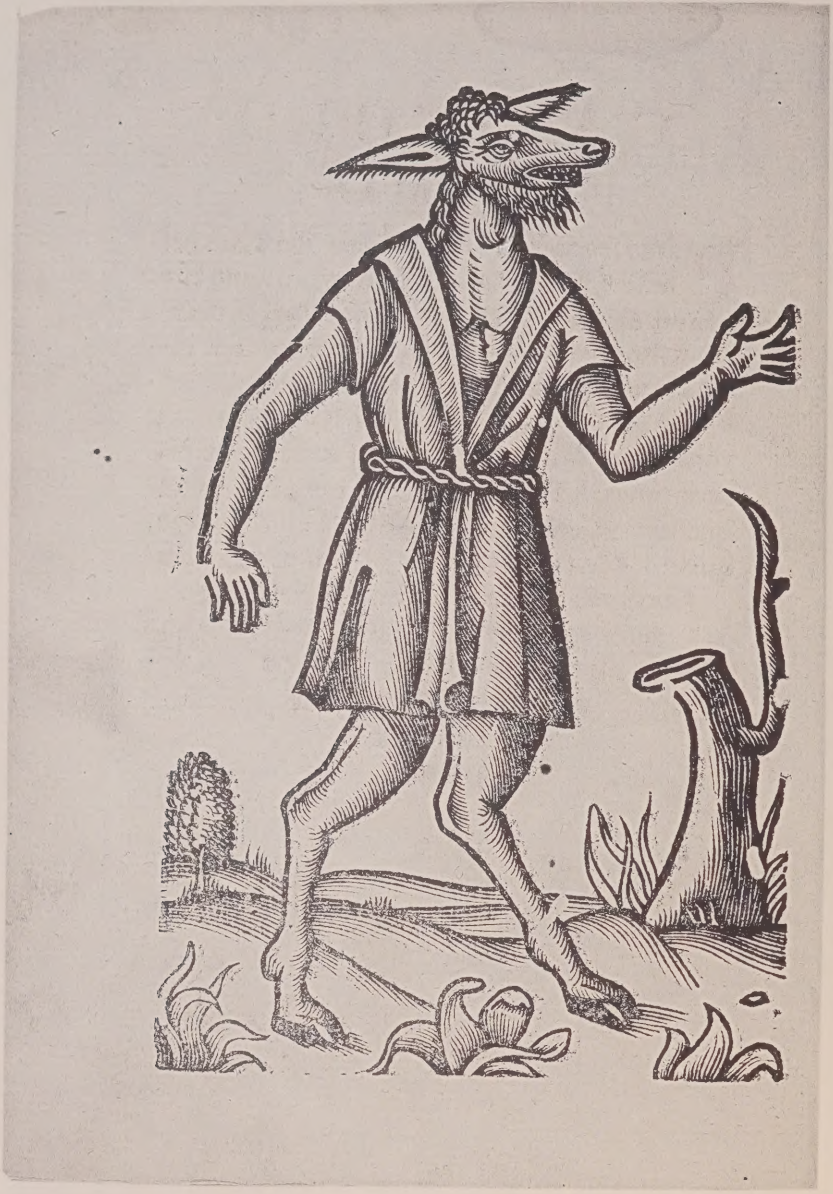
Nela terra nona di S.F. trouata nouamente dal Re di portugallo ſotto tramótana
ſono ſtato trouate tal ſorte d'huomeni: come qui uedete. hãno teſta di cane peloſa cõ doe
longe orechie corpo e brazze humani: doe gambe di cauallo, le ungie di boue: ueſteno d'pelle,
nõ parlano ma abagliano forte et ſono grandi aſaſini: e uiueno di rapina. qſti tali ſi chiamano
barari e ſempre fanõ guerra cõ le iſole uicine a loro: et mãzano huomeni quãdo ne poño hauere:
quãdo nõ, manzano altri animali.

8 Cynocephali from *Opera nelaquale vie molti mostri de tutte le parti del mondo antichi et moderni* (1585).



Sopra liſola probana ſi troua tale creature humane, ma ſono male formati, hano ghãbe curte: spale alte collo ſutile. el capo grãdiſſimo cõ unochio in fronte, uanno trouando Zoglie et altre belle coſe ſono fieri et beſtiali, nõ cognoſcono quale sia maſchio o femina ſe nõ quando ſono grande uano nudi e uiuono di coſe ſaluatiche, e nõ beueno ſe nõ roſata nõ hanno orechie ma aldeno ſutil mẽte, et una certa generatione de tauani li da grãdiſſimo faſtidio, ſtano nel ſabiõ aſcoſi tãto che qelli tauanĩ paſſano ſopra liſola,

8 One-eyed monster from *Opera nelaquale vie molti mostri de tutte le parti del mondo antichi et moderni* (1585).



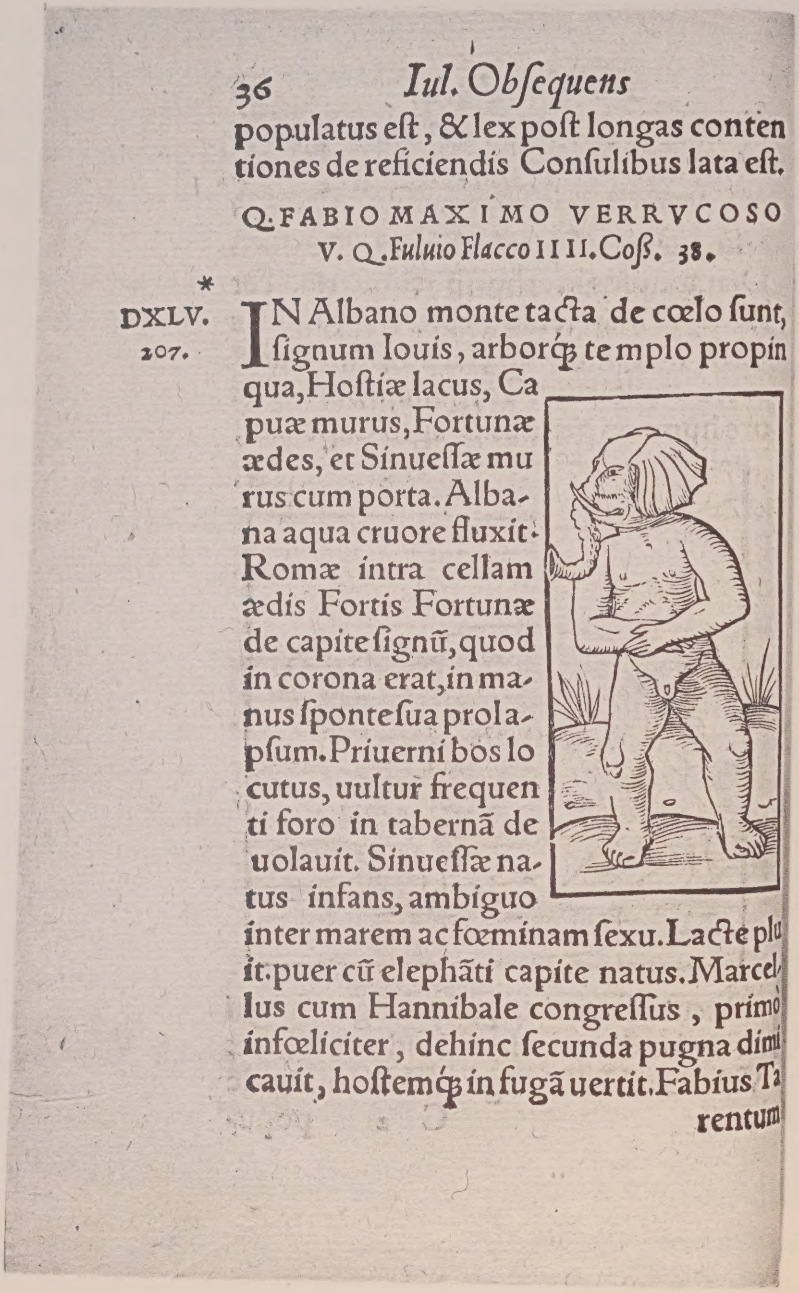
9 Cynocephali from *Aggivnta alla quarta parte dell'Indie* (1623).

duction of Christianity in the Spanish and Portuguese colonies.[69] Botero presented readers of the period of the Italian Counter-Reformation with a vision of the world based in traditional theological doctrines and interspersed with pages of new cosmological information, updates on the state of religion, along with accounts of the diversity of peoples throughout the world.[70] For the European ruling classes, the *Relationi universali* also served as a manual of political geography with valuable information on the resources, governments, and religions of the world.[71]

Originally published in three parts in Rome between 1591 and 1595, with a second expanded edition printed in Venice in 1596, the *Relationi universali* saw over sixty editions and translations published by the end of the seventeenth century.[72] In 1618 and 1623, the *Aggivnta alla quarta parte dell'Indie*, or supplement, was published together with the *Relationi universali* as well as a separate illustrated companion to Botero's reports of 'monsters and the customs of the Indies.' The *Aggivnta* contains sixteen woodcut illustrations of monstrous peoples accompanied by explanations of their habitats, customs, and physical nature. Besides containing the same illustrations of monsters in Cavalieri's book of prints (1585), the supplement also reproduces Hans Burgkmair's earlier depictions of natives of Africa and the Americas, some of which first illustrated the important broadside *De Novo Mondo* (1508) by Amerigo Vespucci (1454–1512).[73] The monstrous peoples of the past give way to exotic peoples of the world in the pages of the *Aggivnta*. Next to the illustration of the cynocephali, Botero supplies an account of a monster with the head of a dog, with human arms and legs like horses, all covered in animal fur, capable of barking, and surviving on hunting human flesh like 'those in Brazil.'[74] Botero contextualizes the narratives of medieval monstrous peoples in the contemporary realities of European imperial expansion in Africa and the Americas.[75] In this ideological framework, the union of the old narratives of the cynocephali and the recent tales of cannibalism in the New World into one discourse illustrates a process of 'Othering' in motion. In essence, Botero creates the figure of the 'Other' by viewing the cultures, religions, habits, and bodies of non-European peoples through the lens of monstrosity.[76]

10 Julius Obsequens (4th century A.D.). *Prodigiorum liber.*
Basel: Johannes Operinus, 1552.

In 1508, the Venetian humanist scholar and printer Aldus Manutius (1449–1515) published the first printed collection of *Prodigiorum liber*, a chronicle on Roman



36 *Iul. Obſequens*

populatus eſt, & lex poſt longas contentiones de reficiendis Conſulibus lata eſt.

Q. FABIO MAXIMO VERRVCOSO
V. Q. *Fuluio Flacco* IIII. *Coſſ.* 38.

* DXLV. 207. IN Albano monte tacta de cœlo ſunt, ſignum Iouis, arborqꝫ templo propinqua, Hoſtiæ lacus, Capuæ murus, Fortunæ ædes, et Sinueſſæ murus cum porta. Albana aqua cruore fluxit. Romæ intra cellam ædis Fortis Fortunæ de capite ſignũ, quod in corona erat, in manus ſponte ſua prolapſum. Priuerni bos locutus, uultur frequenti foro in tabernã deuolauit. Sinueſſæ natus infans, ambiguo inter marem ac fœminam ſexu. Lacte pluit. puer cũ elephãti capite natus. Marcellus cum Hannibale congreſſus, primò infœliciter, dehinc ſecunda pugna dimicauit, hoſtemqꝫ in fugã uertit. Fabius Tarentum

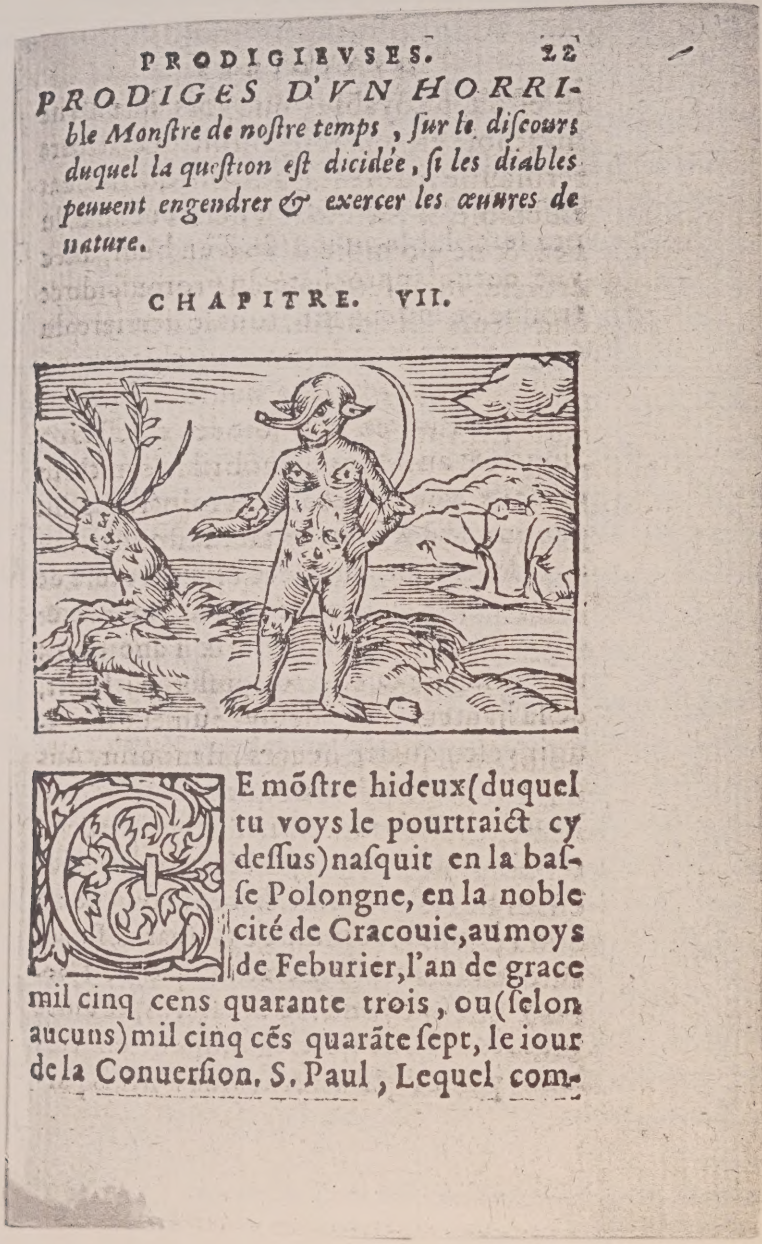
10 Monster from *Prodigiorum liber* (1552).

monsters and prodigies assembled from Livy's *History of Rome* (written between 27 and 9 B.C.) by the fourth-century author Julius Obsequens. First published with the *Epistolae* of Pliny the Younger, Manutius's edition of this wonder book circulated among Renaissance readers keen to decipher the meanings of prodigies, omens, and other secrets of the supernatural world.[77] Often illustrated, wonder books inspired the imagination of subsequent generations of readers by transporting monstrous beasts and peoples from the finite leaves of medieval manuscripts into the copious pages printed in books of the early modern period.[78]

Religious debates on the significance of supernatural phenomena and monsters during the course of the Reformation ultimately shaped the publication of *Prodigiorum liber* and other books of the same genre, including works such as *Histoires prodigieuses* (1560) and *Tractatus de monstris* (1570).[79] Books, pamphlets, broadsheets, and printed material of all sorts exposed readers of the period to an array of views on teratology—understood as the study of monsters and human deformities—while also providing theologians and secular authors with the means to disseminate religious propaganda and popular works devoted to monsters. In interpretations of the Lutheran and humanist scholar Conrad Lycosthenes, God's rejection of religious errors such as blasphemy, heresy, conspiracy, and sedition found a medium of expression in the bodies of exotic monsters as well as abnormal births, strange meteorological events, natural disasters, and plagues.[80] *Prodigiorum liber* had at least twelve printings prior to the most important edition brought forth by Lycosthenes in 1552, a volume which also contained the works *De prodigiis* and *Norica, sive De ostentis*.[81] In his edition of Obsequens, Lycosthenes chronicles Roman prodigies and monsters from the years 190–12 B.C., explains the consequences of each event, and illustrates a number of them with eighty-three woodcuts printed within the text. Such preoccupations with deciphering the meanings of prodigies and monsters found expression in the pages of wonder books, a distinctive genre which advanced considerably with the publication of Lycothenes's own richly illustrated compendia of wonders in 1557.[82]

11 Pierre Boaistuau (ca. 1517–1566). *Histoires prodigieuses.*
Paris: Jean de Bordeaux, 1568.

Prior to the publication of the first edition of 1560, the French Renaissance writer Pierre Boaistuau made a journey to the royal court of England to present Queen Elizabeth I with



PRODIGIEVSES. 22

PRODIGES D'VN HORRIble Monſtre de noſtre temps, ſur le diſcours duquel la queſtion eſt dicidée, ſi les diables peuuent engendrer & exercer les œuures de nature.

CHAPITRE. VII.

Ce mõſtre hideux (duquel tu voys le pourtraict cy deſſus) naſquit en la baſſe Polongne, en la noble cité de Cracouie, au moys de Feburier, l'an de grace mil cinq cens quarante trois, ou (ſelon aucuns) mil cinq cẽs quarãte ſept, le iour de la Conuerſion. S. Paul, Lequel com-

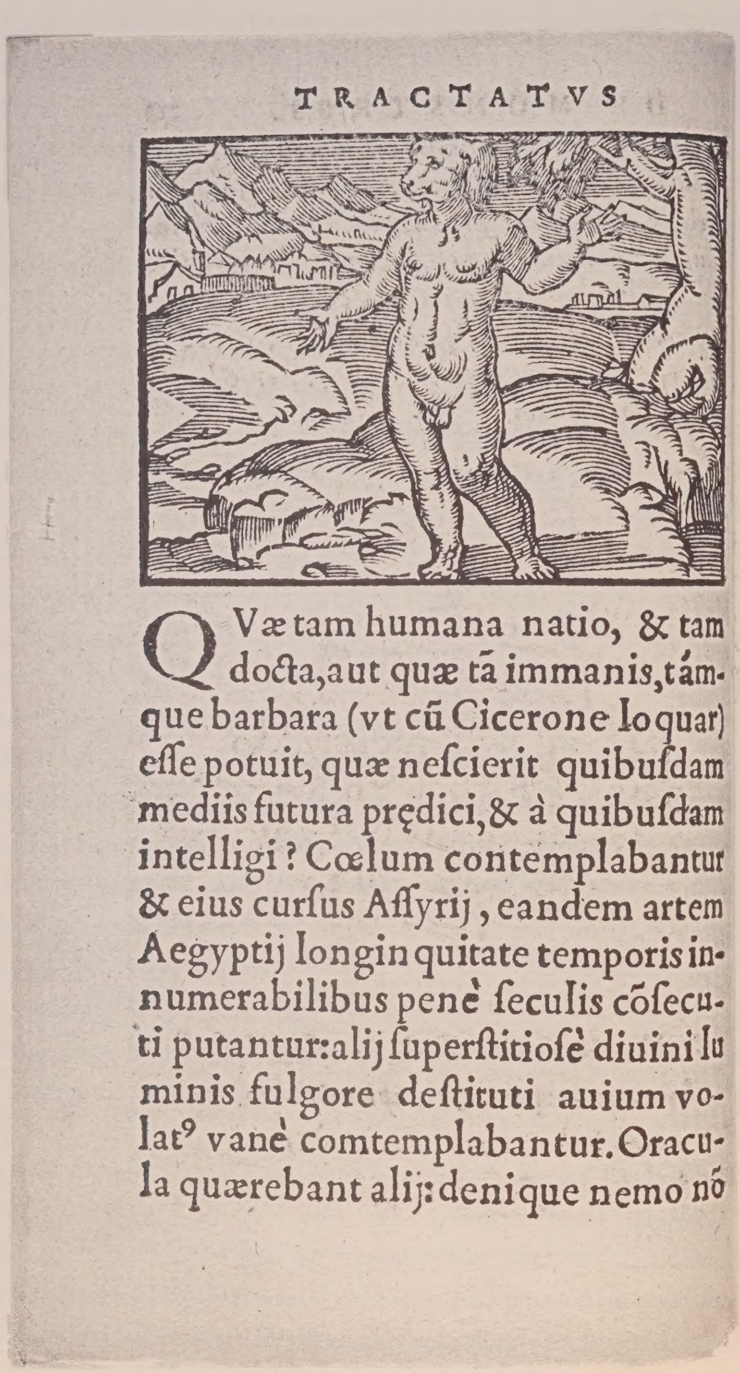
11 'Hideous monster' from *Histoires prodigieuses* (1568).

his *Histoires prodigieuses*, a precious dedication manuscript profusely illustrated with forty-two illuminations of the most remarkable subjects.[83] Boaistuau's *Histoires prodigieuses* was printed within months as a quarto volume covering a selection of thematic chapters, each introduced with woodcut vignettes of prodigies, supernatural phenomena, and monsters of different natures.[84] In the tradition of wonder books, *Histoires prodigieuses* interprets the exotic peoples of medieval encyclopaedias, chronicles, and bestiaries as signs of the religious and political struggles tied to the Reformation.[85] As reports of births of strange creatures from all over Europe were published, monstrous peoples ceased to exist in the popular imagination only at the world's fringes. In this instance, Boaistuau recounts the presence of two monsters found in towns in Poland and Germany, one bearing an elephant's trunk and the other resembling a centaur, both of which were taken to explain the prophetic significance of 'monsters with human figures' in the political and religious context of the time.[86]

The complex publication history of *Histoires prodigieuses* is intertwined with the prodigy tradition at the centre of religious polemics in sixteenth-century France. In the first chapter of the 1560 edition, Boaistuau introduces a Protestant and anti-papal undertone when he describes the existence of a devil worshiped in India who wears 'a crown made like the papal tiara.'[87] Subsequent editions of the work would omit this claim and other fragments offensive to Catholic sensibilities.[88] In fact, François de Belleforest (1530–1583) and Arnauld Sorbin (1532–1606) recast the Protestant stance of *Histoires prodigieuses* to represent their Catholic views in their own editions published before 1598.[89] Both authors went beyond editing the book in the process of defending their faith by reappropriating emblematic monsters like the Papal Ass and the Monk Calf for Catholic propaganda against reformers.[90] Of all the wonder books published in the sixteenth century, *Histoires prodigieuses* became the most important in France with thirty-seven editions printed before 1598, along with the 1,282 pages of content added to the original text by Boaistuau and by other authors after his death.

12 Arnaud Sorbin (1532–1606). *Tractatus de monstris*. Paris: Jerome de Marnef and Guillaume Cavellat, 1570.

Arnaud Sorbin, Bishop of Nevers and preacher to the king, was one of the many writers in the sixteenth century who turned to publishers to meet the high demand from readers of every class and region in Europe for literature on prodigies. These books took the form



TRACTATVS

QVæ tam humana natio, & tam docta, aut quæ tã immanis, támque barbara (vt cũ Cicerone loquar) eſſe potuit, quæ neſcierit quibuſdam mediis futura prędici, & à quibuſdam intelligi? Cœlum contemplabantur & eius curſus Aſſyrij, eandem artem Aegyptij longinquitate temporis innumerabilibus penè ſeculis cõſecuti putantur: alij ſuperſtitioſè diuini luminis fulgore deſtituti auium volat⁹ vanè comtemplabantur. Oracula quærebant alij: denique nemo nõ

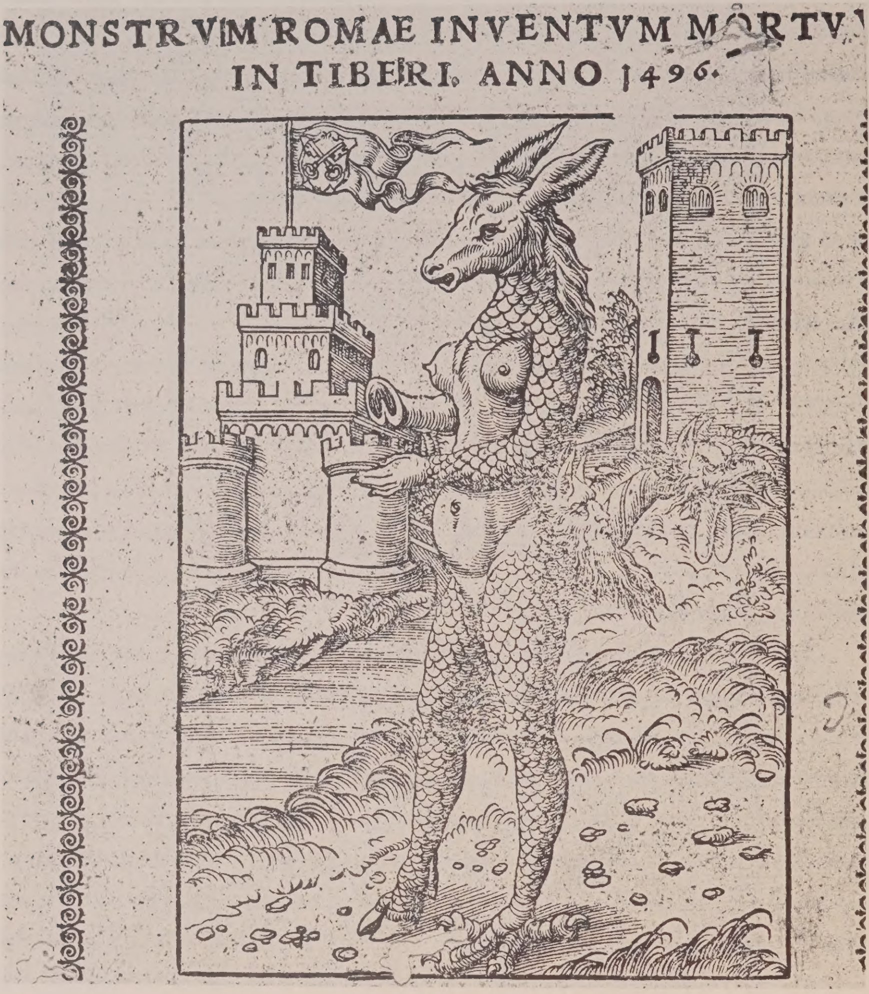
12 Cynocephali from *Tractatus de monstris* (1570).

of wonder books, theological pamphlets, propaganda broadsides, and printed news pertaining to the tradition of divination via monsters and monstrous births.[91] First published in Latin in 1570, *Tractatus de monstris* is the source for the fifth volume of Boaistuau's *Histoires prodigieuses*. In 1582, François de Belleforest's translation of the original Latin was added to this popular six-volume French series on prodigies taken from ancient sources, the Bible, and contemporary reports.[92] Jerome de Marnef (1515?–1595), a member of an active family of publishers and printers in Paris, prepared both editions of Sorbin's *Tractatus de monstris* following the scheme set by Boaistuau in 1560.[93] Sorbin repurposes the pages of the *Histoires prodigieuses* with their original controversial Protestant subtexts, in order to target the writings of Calvinists and Lutheran authors on monsters directly.[94] The birth in 914 of a 'strange and monstrous figure,' resembling the dog-headed beings of classical and medieval sources, is recorded in one of the early episodes of the book to symbolize a curse upon humanity as a consequence of its endless struggles to unite under one faith.[95] In general terms, Sorbin regards the occurrences of monstrous births as the religious transgression of entire groups instead of representing the sins of an individual, particularly the mother.[96]

Every monster in this wonder book is presented as a sign of divine displeasure over religious and political conflicts from the period of the Roman Empire to the early years of the sixteenth century.[97] Sorbin relates the polemic accounts of two monstrous births known as the Papal Ass (1496) and the Monk Calf (1523) in an effort to voice his harsh anti-Protestant views. Both prodigies circulated in a number of broadsides around the time of the publication in 1523 of an influential propaganda pamphlet in which these monsters were explained as indicative of the vices of the papacy and monastic institutions.[98] In turn, Sorbin reinterprets the Papal Ass and the Monk Calf as symptoms of the negative effects of Calvinism during his time and, simultaneously, as expressions of the heresy of key figures of the Reformation, especially Martin Luther (1483–1546) and his supporters.[99]

13 *Abbildung des Bapstum.* [Wittenberg, 1545].

The message of Evangelical authors found a quick, affordable, and effective medium in the pamphlets and the broadsides printed and disseminated across the cities and towns of Europe during the Reformation. In the same vein, Protestant and Catholic authors exploring the divine implications of prodigies in accordance with their respective tradi-

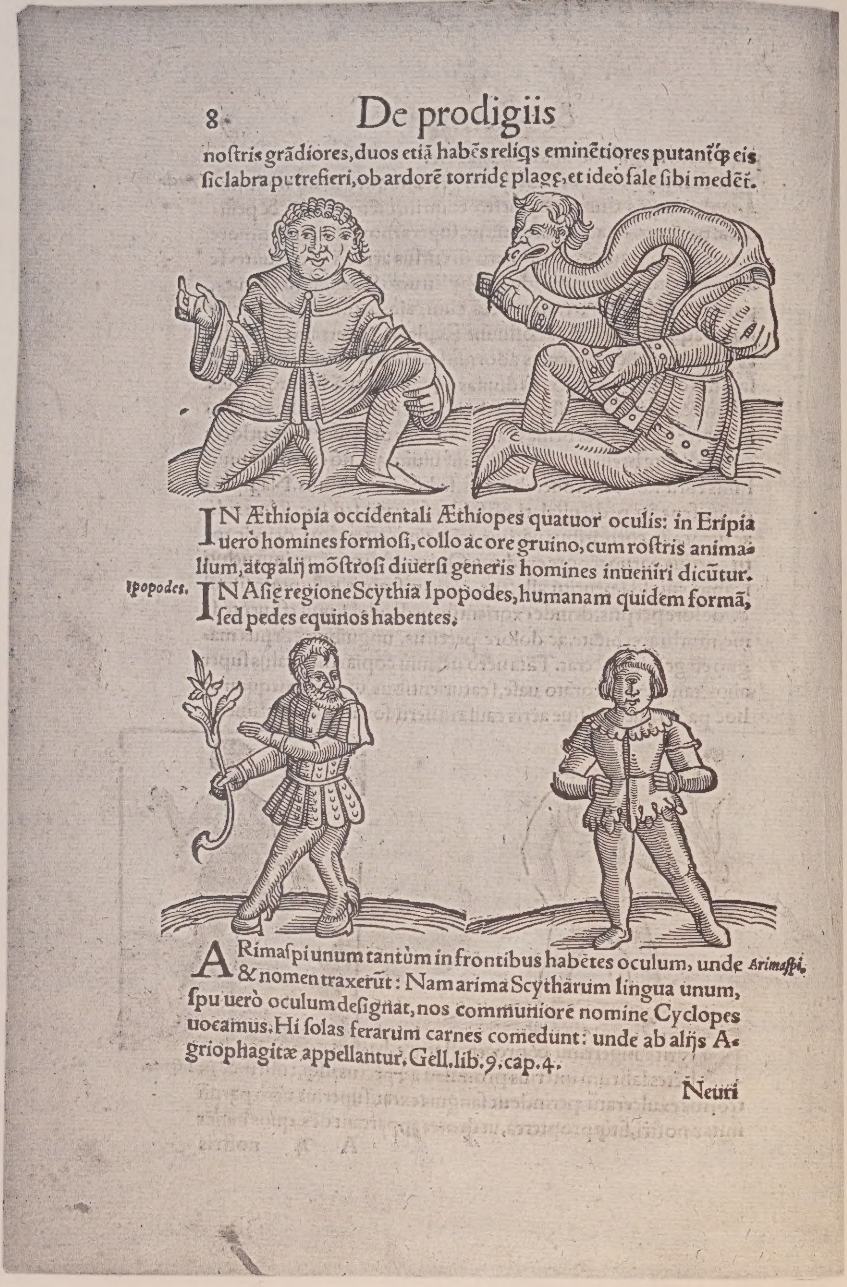


13 'Monster of Rome' from *Image of the Papacy* (1545).

tions also took to these ephemeral publications to spread stories of monstrous births and monsters in general. In the hands of literate individuals such as preachers, visual and textual representations of monsters like the Papal Ass rapidly left the printed pages to be transformed into oral tales heard and then retold by peoples from all walks of life in the late fifteenth century and throughout the sixteenth century.[100]

As with countless other tales of monsters and prodigies, the story of the Papal Ass begins with rumours. In December of 1495, Rome's thriving street life was interrupted by a great devastation caused by four days of heavy rains.[101] Amid the destruction, rumours surfaced about the sighting of a hideous monster. One possible source for these rumours was the street itself, speaking through the voices of anonymous city dwellers, street criers, or possibly peddlers. The first person to commit the story to paper was a Venetian diplomat who wrote about it in a letter to government officials in January of 1496 and, from that moment on, accounts of the monster multiplied in the pages of broadsides, pamphlets, and books for several decades.[102] The earliest known printed illustration of the Papal Ass is a 1498 engraving signed by the Moravian printmaker Wenzel von Olmütz (active 1481–1497), which was eventually used by the reformer Philip Melanchthon (1497–1560) for his popular propaganda pamphlet first published in 1523, with woodcuts by Lucas Cranach (ca. 1472–1553).[103] In *The Pope-Ass of Rome*, Melanchthon conceives the monster as the embodiment of the papal Antichrist.[104] The image of this portent circulated between 1523 and 1549 in at least fourteen editions in various formats, translations, and versions for an estimated total of more than twenty thousand copies.[105]

'What God himself thinks of the papacy is shown here by this horrible picture, which should horrify all who would take it to heart.'[106] Luther wrote these words of warning to accompany Cranach's depiction of the 'Monster of Rome' of 1523, which was reprinted twenty-two years later as part of a series of nine woodcut illustrations under the title *Image of the Papacy*.[107] The monster stands in the centre of this broadside, showing all its distinct body parts in one frame in order to be seen, taken in, and above all, to be deciphered for what it is: the product of an extensive process of appropriation. Each of the monster's elements, from its equine body and head to its mixed animal limbs, were initially taken from medieval iconography understood by readers and witnesses in the last decade of the fifteenth century.[108] In the following decades, the Papal Ass grew intricate layers of new meaning when writers like Luther and Sorbin appropriated it as a propaganda instrument in their polemic works. The story of this emblematic monster has remained alive in the pages of wonder books, Reformation pamphlets and broadsides, natural history volumes, and teratology treatises published in the sixteenth and seventeenth centuries. In the case of the Fisher copy of the *Image of the Papacy*, the Papal Ass survived into the present (along with six of the nine other original illustrations) as a pastedown in the binding of a Saxon imprint from 1569.



8 De prodigiis

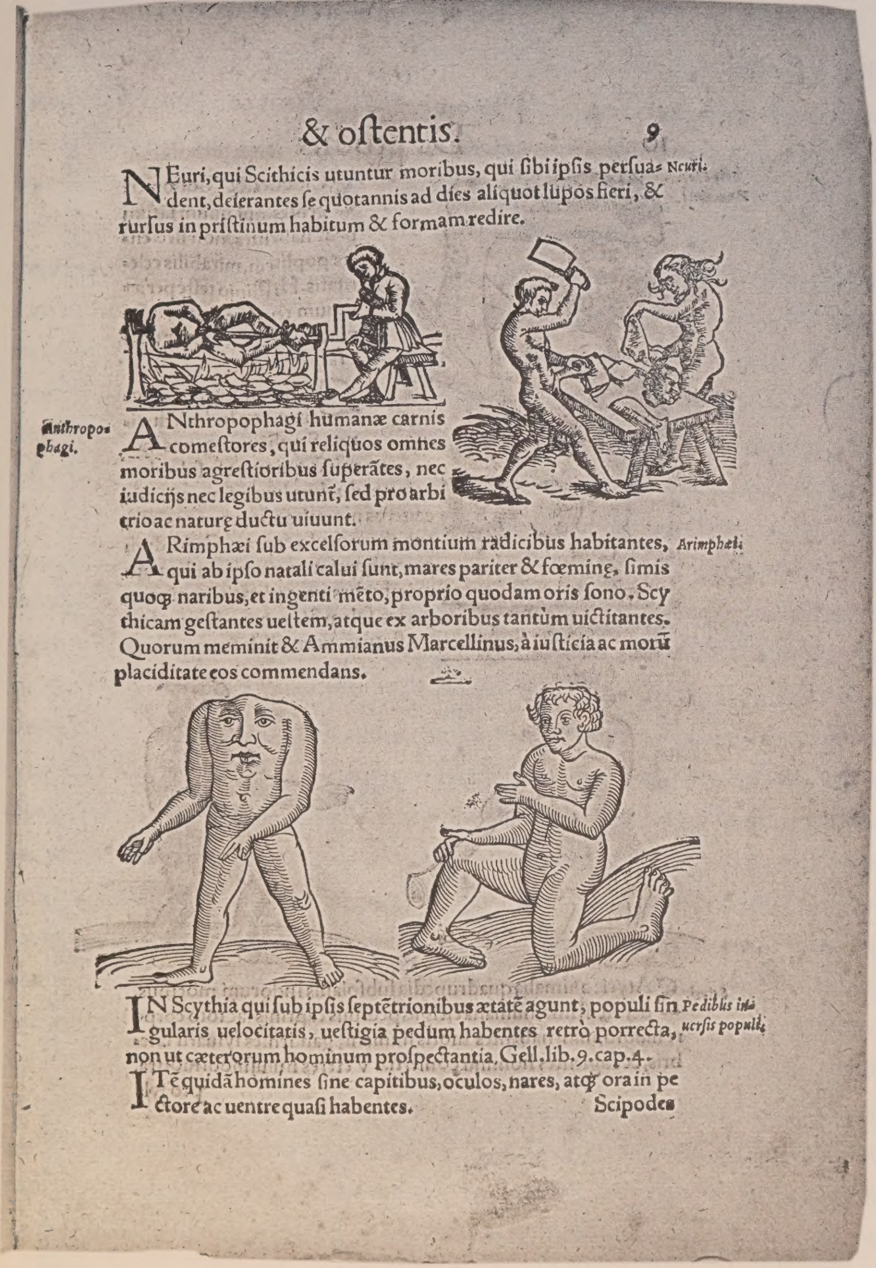
noſtris grãdiores, duos etiã habẽs reliqs eminẽtiores putantq́ꝫ eis ſic labra putrefieri, ob ardorẽ torridę plagę, et ideò ſale ſibi medẽt.

IN Æthiopia occidentali Æthiopes quatuor oculis: in Eripia uerò homines formoſi, collo àc ore gruino, cum roſtris animalium, atq́ꝫ alij mõſtroſi diuerſi generis homines inueniri dicũtur.

Ipopodes. IN Aſię regione Scythia Ipopodes, humanam quidem formã, ſed pedes equinos habentes.

ARimaſpi unum tantùm in frontibus habẽtes oculum, undę Arimaſpi.
& nomen traxerũt: Nam arima Scytharum lingua unum, ſpu uerò oculum deſignat, nos communiore nomine Cyclopes uocamus. Hi ſolas ferarum carnes comedunt: unde ab alijs Agriophagitæ appellantur, Gell. lib. 9. cap. 4.

Neuri



& oſtentis. 9

NEuri, qui Scithicis utuntur moribus, qui ſibi ipſis perſuadent, deierantes ſe quotannis ad dies aliquot lupos fieri, & rurſus in priſtinum habitum & formam redire. Neuri.

ANthropophagi humanæ carnis comeſtores, qui reliquos omnes moribus agreſtioribus ſuperãtes, nec iudicijs nec legibus utunt̃, ſed pro arbitrio ac naturę ductu uiuunt. Anthropophagi.

ARimphæi ſub excelſorum montium radicibus habitantes, qui ab ipſo natali calui ſunt, mares pariter & fœminę, ſimis quoqꝫ naribus, et ingenti mẽto, proprio quodam oris ſono, Scythicam geſtantes ueſtem, atque ex arboribus tantùm uictitantes. Quorum meminit & Ammianus Marcellinus, à iuſticia ac morũ placiditate eos commendans. Arimphæi.

IN Scythia qui ſub ipſis ſeptẽtrionibus ætatẽ agunt, populi ſingularis uelocitatis, ueſtigia pedum habentes retrò porrecta, non ut cæterorum hominum proſpectantia. Gell. lib. 9. cap. 4. Pedibus inuerſis populi.

ITẽ quidã homines ſine capitibus, oculos, nares, atqꝫ ora in pectore ac uentre quaſi habentes.

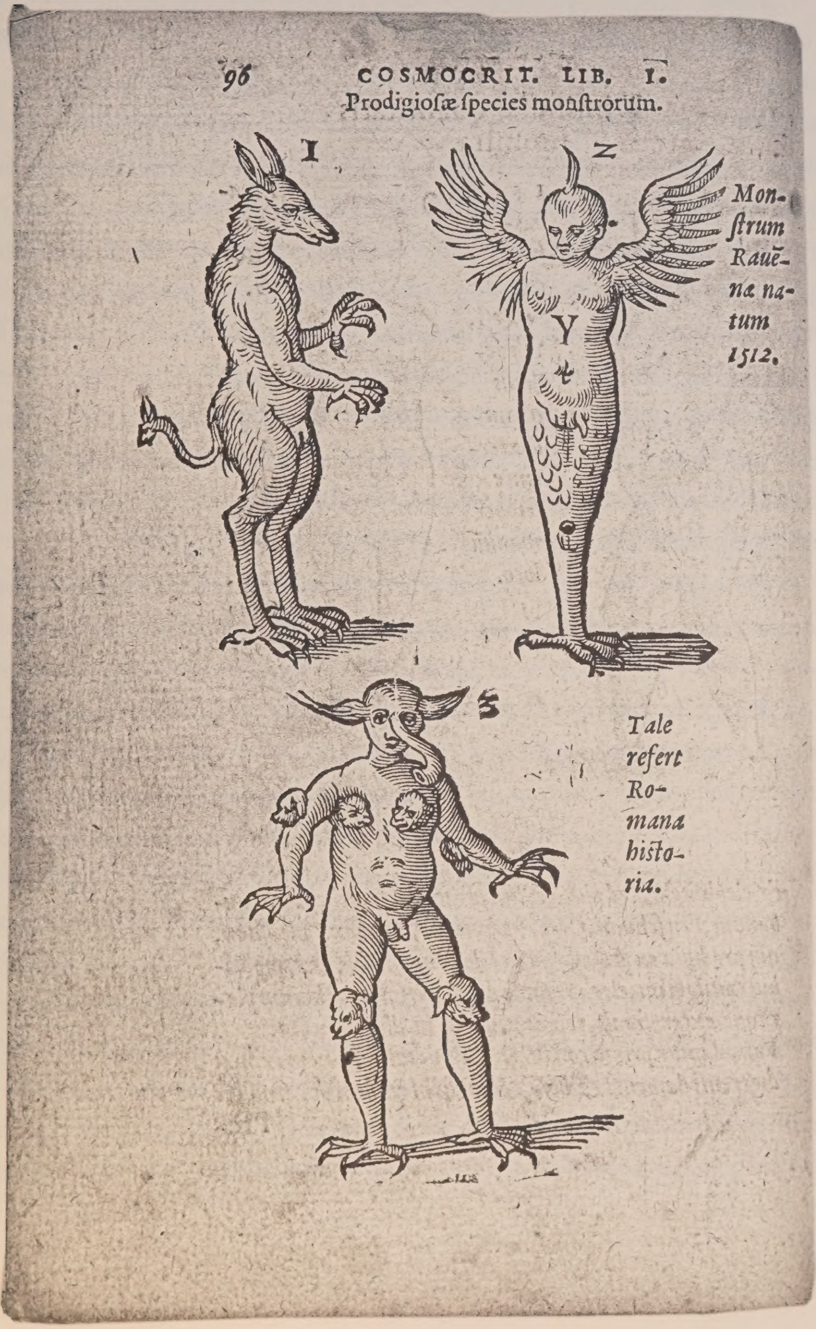
Scipodes

14 Monsters from *Prodigiorum ac ostentorum chronicon* (1557).

14 Conrad Lycosthenes (1518–1561). *Prodigiorum ac ostentorum chronicon.* Basel: Henrich Petri, 1557.

In the years of the early Restoration period when the Anglican cleric and scholar John Spencer (1630–1693) published his *Discourse concerning Prodigies* in 1663, the influence of prodigies in religious propaganda was still very much alive. 'The superstition of prodigies commits no small waste upon religion,' Spencer argues, 'as the fears it creates abuse the minds of men.'[109] Spencer not only rejected the interpretation of prodigies as divine signs altogether, but he also criticized their use in the religious and political campaigns carried out against the Restoration in publications such as *Mirabilis annus* (1661–1662).[110] In addition to newspaper reports, printed ballads, and other popular genres, such wonder books published in English cite, at great length, a variety of continental authorities on prodigies and monsters.[111] In the preface to first *Mirabilis annus,* its anonymous compiler quotes a century-old reference in what is arguably the most significant wonder book published in the sixteenth century.[112]

Lycosthenes's *Prodigiorum ac ostentorum chronicon* came out in concurrent German and Latin folio tomes from the press of Heinrich Petri (1508–1579), an important Reformation printer who had previously produced various editions of Münster's *Cosmographia.*[113] From Creation to the year 1557, this wonder book presents a wide range of episodes in chronological order with descriptions directing the reader to receive God's message through prodigies, portents, and omens revealing stories of the end of days.[114] Each page contains several illustrations amounting to some fifteen hundred woodcuts mainly derived from the Basel editions of the *Cosmographia* and Schedel's *Nuremberg Chronicle.*[115] What constitutes a prodigy in Lycosthenes's approach is almost anything supernatural or foreign to the natural order, including monstrous peoples, deformed births, earthquakes and floods, strange celestial events, and other supernatural phenomena that might appeal to his readers.[116] *Prodigiorum ac ostentorum chronicon* favours classical sources such as Pliny but it also embraces the writings of contemporaries like Job Fincel (d. 1582) in his *Wunderzeichen* (1556), a collection offering a Protestant outlook on portents and prodigies that supplied much of the material for the last seven years of the chronicle.[117] Lycosthenes's wonder book became a model for printers looking to venture into this profitable genre and desiring to create similar reference books on prodigies and monsters for readers beyond the Renaissance period.[118]



96 COSMOCRIT. LIB. I.

Prodigioſæ ſpecies monſtrorum.

Mon-
ſtrum
Rauẽ-
næ na-
tum
1512.

Tale
refert
Ro-
mana
hiſto-
ria.

15 ‘Prodigal monsters’ from *De naturae divinis characterismis* (1575).

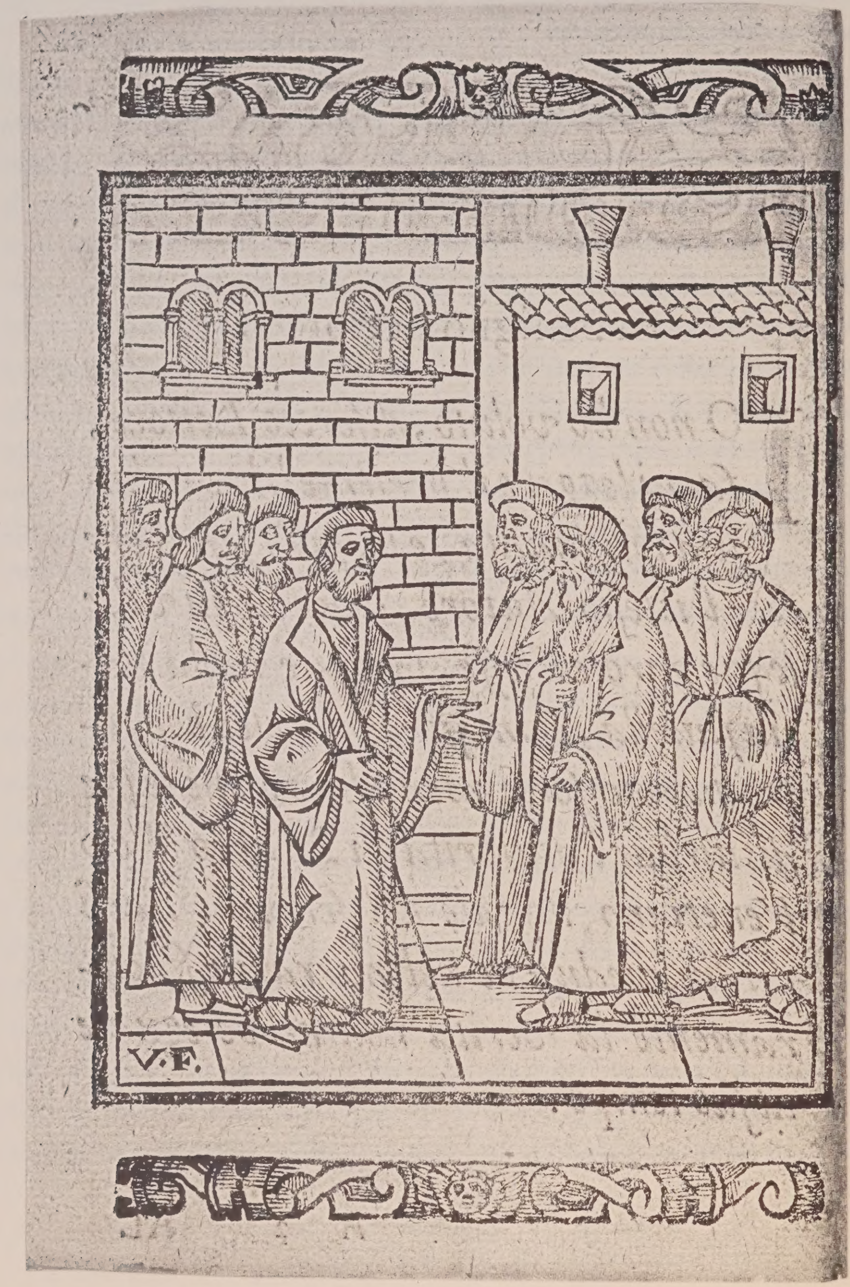
15 Cornelius Gemma (1535–1578). *De naturae divinis characterismis.* Antwerp: Christophe Plantin, 1575.

The Belgian physician Cornelius Gemma (1535–1578) holds a significant place in the history of cosmology for his role in the intellectual debates over two significant celestial events of the sixteenth century: the appearance of a new star in 1572 and the observation of a comet in 1577.[119] In his *De naturae divinis characterismis*, Gemma looks beyond the stars to advance his 'cosmological art' in order to convert the divine code of prodigies into a language understood by his contemporary readers.[120] The range of methods Gemma applies to decipher the signs of prodigies are all supported by his broad interests in astronomy and astrology, in addition to theories relating to natural philosophy, medicine, divination, teratology, eschatology, encyclopedism, and mnemonic principles.[121] Gemma turned a page in the history of monsters as a result of his *ars cosmocritica*, an approach which analyzes the 'critical signs' of prodigies in order to interpret their physical nature, predict the future in their signs, and unravel other hidden messages.[122]

In *De naturae divinis characterismis*, Gemma produces an extensive list of monstrous peoples or 'wild humans in appearance and way of life' as he explains a number of causes for their physical qualities and describes some of the ways that monsters are produced in nature. Gemma takes the same route as Botero in his *Relationi universali* in locating monstrous peoples in the lands described by classical authors, in the most recent printed accounts of the Americas, and in the polemical reports and medical treatises of monsters born in Europe during the sixteenth century.[123] He also defines monsters as prodigies delivered to humans as divine warnings, manifested in both terrestrial forms and as celestial events.[124] Lycosthenes and Boaistuau are represented in his writings on prodigies but he also branches outside the field of monsters to include authorities involved in the development of sixteenth-century science.[125] In the process of defining his cosmological approach, Gemma manages to introduce a 'new teratology' that assigns medical and other meanings to monsters and prodigies.[126] In the end, he releases his subjects from the conventional categories of monsters found in wonder books, encyclopaedias, cosmographies, theological pamphlets and broadsides, as well as other genres.

Part II:
On Monstrous Encounters

The history of every civilization is the history of encounters.[127] In the Age of Exploration, the initial wave of European travellers reported the first narratives of encounters in travel accounts, journals, letters, cartographic material, and dispatches that were immensely popular in the sixteenth and seventeenth centuries. In these narratives, European explorers let their imagination run wild when describing encounters with the peoples and lands of the New World and other continents. European readers eventually learned from these narratives how to define their own identities as 'normal' in response to the 'Otherness' of the peoples who soon became colonial subjects. In this view, every aspect of European culture and society was located at the centre of a colonial discourse that often preconceived non-European peoples through the lenses of primitivism, cannibalism, and monstrosity. As a result, the medieval writings on monsters and monstrosity were revived once again to fuel the machinery of European colonial expansion into the rest of the world.

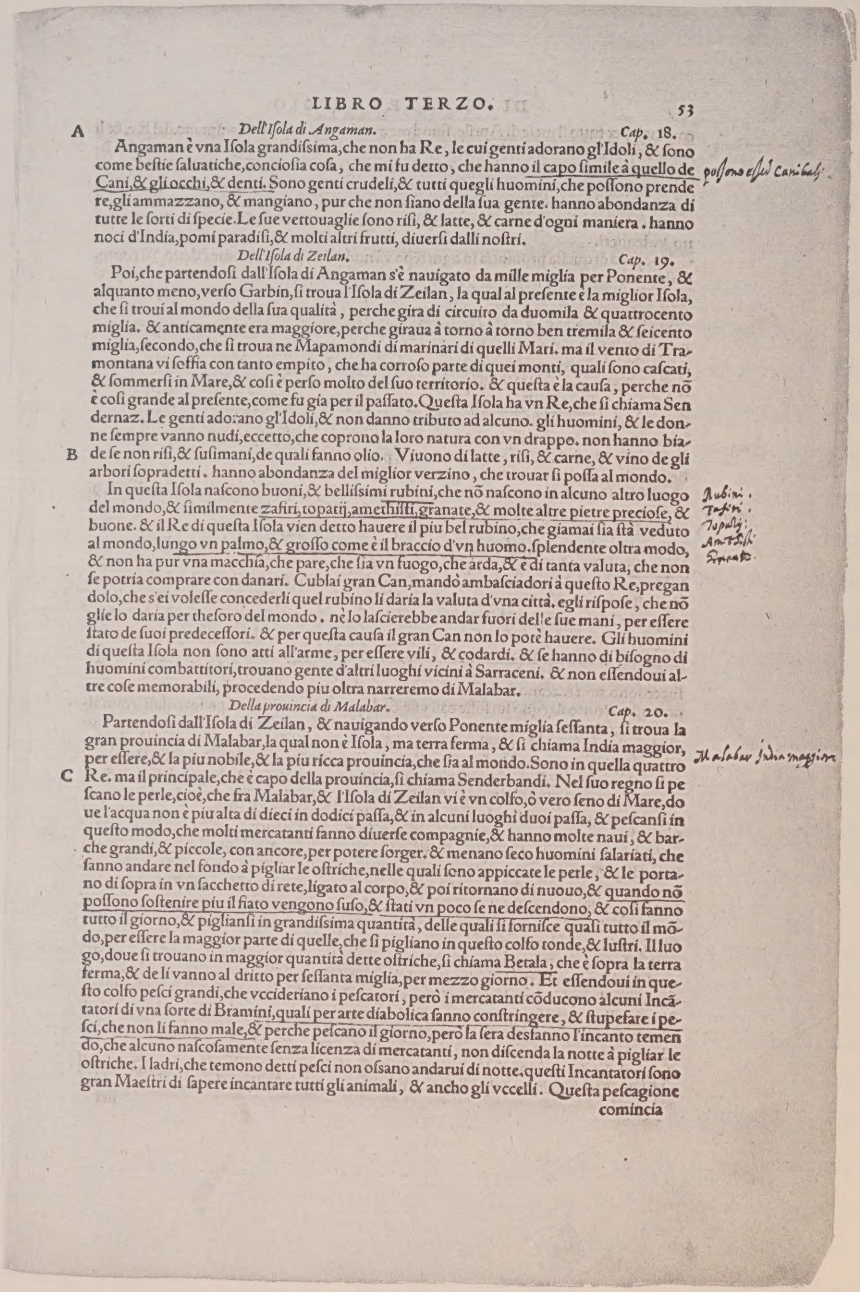


16 Frontispiece from *Delle meraviglie del mondo* (1626).

16 Marco Polo (1254–1323?) *Delle meraviglie del mondo.*
Venice: Ghirardo & Iseppo Imberti, 1626.

The Venetian merchant Marco Polo and the romance writer Rustichello of Pisa (ca. 1250–ca. 1300) met as prisoners in Genoa in the aftermath of the Battle of Meloria in 1284. Under these circumstances, Polo and Pisa brought together their stories and talents as they began the journey of composing one of the most influential books of the medieval period. Both Marco Polo and his multifaceted book have become historical icons over the course of centuries.[128] Marco Polo is regarded as the first European to leave a written record of his extensive travels to China and other regions of the East prior to the end of the thirteenth century.[129] The book, known under the titles *Le Devisement du Monde* and *Il Milione*, was the first of its kind to provide readers with 'eye-witness' accounts of the peoples, cultures, religions, and commerce of another world as yet unwritten in European sources about the East.[130] Although the figure of Marco Polo and the veracity of his book are often met with disbelief, together they stand as one the most compelling narratives of encounters between the East and the West. Marco Polo covers geographical and political knowledge, myths, marvels, natural history, historical accounts, as well as sources about commodities of the East in a book that details each topic as a 'steady narrative.'[131] *The Travels of Marco Polo*, as it is commonly known today, presented European readers with a new world of information about the East encompassing the fields of geography to travel narratives, merchant handbooks, and missionary chronicles.[132] As a result, the book introduced a new genre of western literature and, more precisely, a vision of the East of enduring influence over the writings of encounter during the Age of Exploration.[133]

In his description of the Andaman Islands near India, Marco Polo refers to its inhabitants as 'wild beasts', and proceeds to write that 'all the men of this island have heads like dogs, and teeth and eyes likewise' and even argues that 'they are a cruel generation, and eat everybody that they can catch, if not of their own race.'[134] If Marco Polo's allusion to the classical dog-headed monsters is not fully evident in this passage, the artists producing the miniatures found in the leaves of a number of manuscript versions of the book clearly identify them as the cynocephali.[135] Contrary to common conceptions, Marco Polo reveals few details of the cynocephali and other medieval monsters in his descriptions of the peoples and lands of the East Indies and China.[136] However, he frequently writes on idolatry and the practice of cannibalism, pointing directly to the traditional figure of the 'monster-cannibal' of the classical and medieval monstrous peoples of the East.[137]



LIBRO TERZO. 53

A *Dell'Iſola di Angaman.* Cap. 18.

Angaman è vna Iſola grandiſsima, che non ha Re, le cui genti adorano gl'Idoli, & ſono come beſtie ſaluatiche, concioſia coſa, che mi fu detto, che hanno il capo ſimile à quello de Cani, & gli occhi, & denti. Sono genti crudeli, & tutti quegli huomini, che poſſono prendere, gli ammazzano, & mangiano, pur che non ſiano della ſua gente. hanno abondanza di tutte le ſorti di ſpecie. Le ſue vettouaglie ſono riſi, & latte, & carne d'ogni maniera. hanno noci d'India, pomi paradiſi, & molti altri frutti, diuerſi dalli noſtri.

poſſono eſſer Canibali.

Dell'Iſola di Zeilan. Cap. 19.

Poi, che partendoſi dall'Iſola di Angaman s'è nauigato da mille miglia per Ponente, & alquanto meno, verſo Garbin, ſi troua l'Iſola di Zeilan, la qual al preſente è la miglior Iſola, che ſi troui al mondo della ſua qualità, perche gira di circuito da duomila & quattrocento miglia. & anticamente era maggiore, perche giraua à torno à torno ben tremila & ſeicento miglia, ſecondo, che ſi troua ne Mapamondi di marinari di quelli Mari. ma il vento di Tramontana vi ſoffia con tanto empito, che ha corroſo parte di quei monti, quali ſono caſcati, & ſommerſi in Mare, & coſi è perſo molto del ſuo territorio. & queſta è la cauſa, perche nõ è coſi grande al preſente, come fu gia per il paſſato. Queſta Iſola ha vn Re, che ſi chiama Sendernaz. Le genti adorano gl'Idoli, & non danno tributo ad alcuno. gli huomini, & le donne ſempre vanno nudi, eccetto, che coprono la loro natura con vn drappo. non hanno biade B ſe non riſi, & ſuſimani, de quali fanno olio. Viuono di latte, riſi, & carne, & vino de gli arbori ſopradetti. hanno abondanza del miglior verzino, che trouar ſi poſſa al mondo.

In queſta Iſola naſcono buoni, & belliſsimi rubini, che nõ naſcono in alcuno altro luogo del mondo, & ſimilmente zafiri, topatij, amethiſti, granate, & molte altre pietre precioſe, & buone. & il Re di queſta Iſola vien detto hauere il piu bel rubino, che giamai ſia ſtà veduto al mondo, lungo vn palmo, & groſſo come è il braccio d'vn huomo. ſplendente oltra modo, & non ha pur vna macchia, che pare, che ſia vn fuogo, che arda, & è di tanta valuta, che non ſe potria comprare con danari. Cublai gran Can, mandò ambaſciadori à queſto Re, pregandolo, che s'ei voleſſe concederli quel rubino li daria la valuta d'vna città. egli riſpoſe, che nõ glie lo daria per theſoro del mondo. nè lo laſcierebbe andar fuori delle ſue mani, per eſſere ſtato de ſuoi predeceſſori. & per queſta cauſa il gran Can non lo potè hauere. Gli huomini di queſta Iſola non ſono atti all'arme, per eſſere vili, & codardi. & ſe hanno di biſogno di huomini combattitori, trouano gente d'altri luoghi vicini à Sarraceni. & non eſſendoui altre coſe memorabili, procedendo piu oltra narreremo di Malabar.

Rubini.
Tafiri.
Topatij;
Amethiſti
Granate.

Della prouincia di Malabar. Cap. 20.

Partendoſi dall'Iſola di Zeilan, & nauigando verſo Ponente miglia ſeſſanta, ſi troua la gran prouincia di Malabar, la qual non è Iſola, ma terra ferma, & ſi chiama India maggior, per eſſere, & la piu nobile, & la piu ricca prouincia, che ſia al mondo. Sono in quella quattro C Re. ma il principale, che è capo della prouincia, ſi chiama Senderbandi. Nel ſuo regno ſi peſcano le perle, cioè, che fra Malabar, & l'Iſola di Zeilan vi è vn colfo, ò vero ſeno di Mare, doue l'acqua non è piu alta di dieci in dodici paſſa, & in alcuni luoghi duoi paſſa, & peſcanſi in queſto modo, che molti mercatanti fanno diuerſe compagnie, & hanno molte naui, & barche grandi, & piccole, con ancore, per potere ſorger. & menano ſeco huomini ſalariati, che fanno andare nel fondo à pigliar le oſtriche, nelle quali ſono appiccate le perle, & le portano di ſopra in vn ſacchetto di rete, ligato al corpo, & poi ritornano di nuouo, & quando nõ poſſono ſoſtenire piu il fiato vengono ſuſo, & ſtati vn poco ſe ne deſcendono, & coſi fanno tutto il giorno, & piglianſi in grandiſsima quantità, delle quali ſi forniſce quaſi tutto il mõdo, per eſſere la maggior parte di quelle, che ſi pigliano in queſto colfo tonde, & luſtri. Il luogo, doue ſi trouano in maggior quantità dette oſtriche, ſi chiama Betala, che è ſopra la terra ferma, & de li vanno al dritto per ſeſſanta miglia, per mezzo giorno. Et eſſendoui in queſto colfo peſci grandi, che vccideriano i peſcatori, però i mercatanti cõducono alcuni Incãtatori di vna ſorte di Bramini, quali per arte diabolica fanno conſtringere, & ſtupefare i peſci, che non li fanno male, & perche peſcano il giorno, però la ſera deſfanno l'incanto temendo, che alcuno naſcoſamente ſenza licenza di mercatanti, non diſcenda la notte à pigliar le oſtriche. I ladri, che temono detti peſci non oſano andarui di notte. queſti Incantatori ſono gran Maeſtri di ſapere incantare tutti gli animali, & ancho gli vccelli. Queſta peſcagione

comincia

Malabar India maggiore

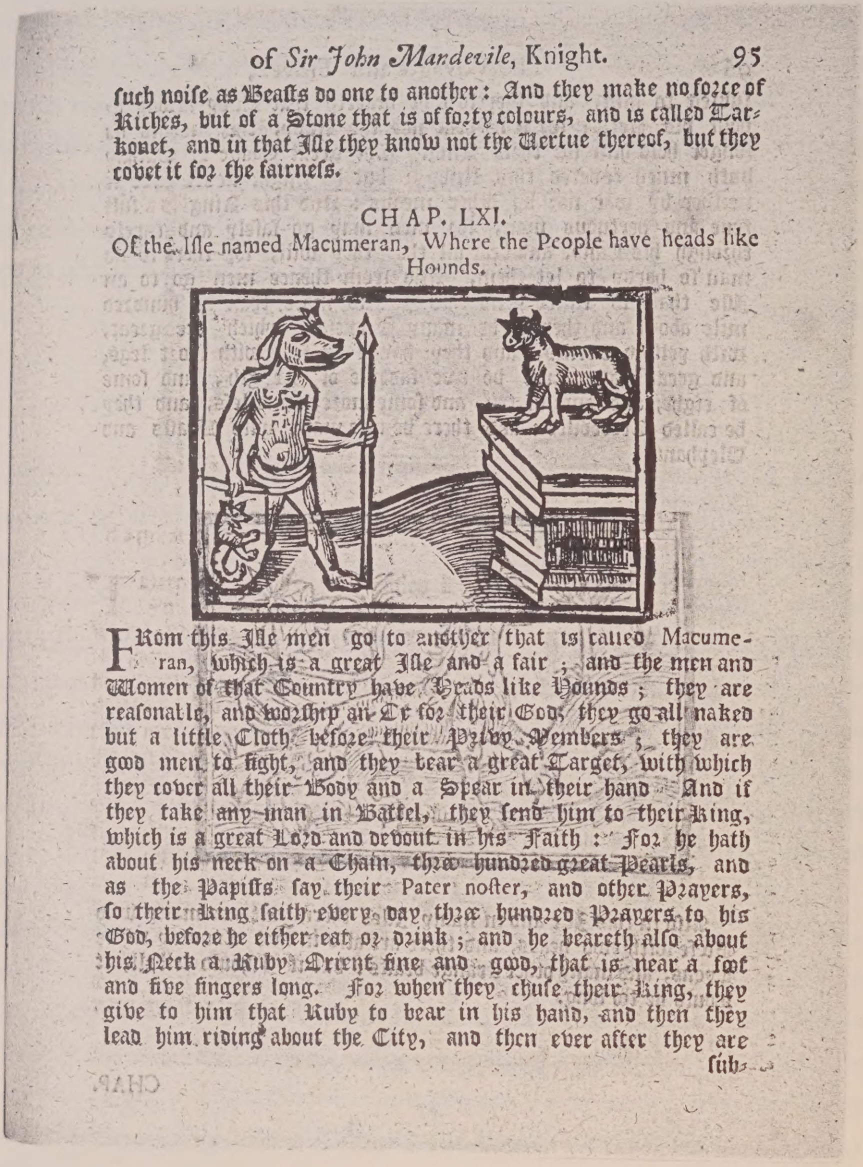
17 Marginal annotations from *Delle navigationi et viaggi* (1559-1565).

The fourteenth-century account of Sir John Mandeville references Marco Polo on this matter, while editions of Ptolemy's *Geographia* and even Mercator's world map (1569) convert his depiction of cannibals in the Andaman Islands into new geographical information.[138] Moreover, European explorers writing letters and chronicles also make references to Marco Polo and other medieval accounts of flesh-eating monsters as they encounter new and strange peoples across the world in the fourteenth and fifteenth centuries. In the end, *The Travels of Marco Polo* is neither a travel narrative nor a compendium of marvels or monsters. What the book offers to readers across time and regions, in all its manuscript versions and printed editions, is a foundational text on the discourse of Otherness in western literature.[139]

17 Giovanni Battista Ramusio (1485–1557). *Delle navigationi et viaggi.* Venice: Giunti, 1559–1565.

Written during the last two years of the thirteenth century, the now lost original manuscript of the Polo and Piso collaboration was the common source for a family tree of 150 extant manuscript versions of *The Travels of Marco Polo* composed in a variety of European languages, including several translations completed during Polo's lifetime.[140] The book was extremely popular from the initial years of its circulation in the medieval manuscript tradition to the abundant printed editions published in the following centuries.[141] The first incunable edition appeared in 1477 in German, quickly followed by the Latin translation of 1485, in addition to numerous editions issued in multiple European languages before the Italian geographer Giovanni Battista Ramusio shifted the course of the book in his best-selling collection of travels published between 1550 and 1559.[142]

In the second volume of the *Navigazioni e viaggi* (1559), Ramusio hails Marco Polo as a hero of the Venetian Republic at a crucial time in the process of European expansion to the Americas.[143] Ramusio not only presents the first biographical sketch of Marco Polo, but he also assigns the book to the genre of travel narratives in the context of his monumental collections of modern voyages around the world.[144] Although readers of this period had access to some twenty-five editions of the book circulating in the sixteenth century, Ramusio's version of *I viaggi di Messer Marco Polo* offers another approach to the text as a result of his editorial ambitions.[145] Instead of writing a new cosmography in the way of Münster, Ramusio aims to advance geographical knowledge by collecting first-hand accounts of explorers into a sourcebook available to contemporary readers in the



of *Sir John Mandevile*, Knight. 95

ſuch noiſe as Beaſts do one to another: And they make no force of Riches, but of a Stone that is of forty colours, and is called Tarkonet, and in that Iſle they know not the Vertue thereof, but they covet it for the fairneſs.

CHAP. LXI.

Of the Iſle named Macumeran, Where the People have heads like Hounds.

From this Iſle men go to another that is called Macumeran, which is a great Iſle and a fair; and the men and Women of that Country have Heads like Hounds; they are reaſonable, and worſhip an Ox for their God; they go all naked but a little Cloth before their Privy Members; they are good men to fight, and they bear a great Target, with which they cover all their Body and a Spear in their hand And if they take any man in Battel, they ſend him to their King, which is a great Lord and devout in his Faith: For he hath about his neck on a Chain, three hundred great Pearls, and as the Papiſts ſay their Pater noſter, and other Prayers, ſo their King ſaith every day three hundred Prayers to his God, before he either eat or drink; and he beareth alſo about his Neck a Ruby Orient fine and good, that is near a foot and five fingers long. For when they chuſe their King, they give to him that Ruby to bear in his hand, and then they lead him riding about the City, and then ever after they are

ſub-

18 Cynocephali from *The voyages & travels of Sir John Mandeville* (1684).

vernacular.[146] The medieval voyages of Marco Polo are edited with the most recent travels of pioneer explorers such as Niccolò de' Conti (1395–1469), Sebastian Cabot (ca. 1474–1557), and Christopher Columbus (1451–1506).[147] In this light, Marco Polo's vision of the East would become a surface, much like a palimpsest, onto which humanist writers and European explorers would impose their own views on the encounters with the 'Other'—understood as the non-European colonized subject—as expressed in travel narratives, maps, and chronicles of the Americas and the rest of the world.[148] One instance of such textual encounter appears in this copy of Ramusio's *Navigazioni e viaggi* where a reader has marked with three words his impressions on the passage on the Andaman Islands: 'possono esser(e) canibali' or 'they could be cannibals.'[149] Written on the margin, this definition of the peoples of these islands reflects the reader's own interpretations of the text just as it highlights one of the key elements of the notion of monstrosity in the process of European imperial expansion to the New World: anthropography.

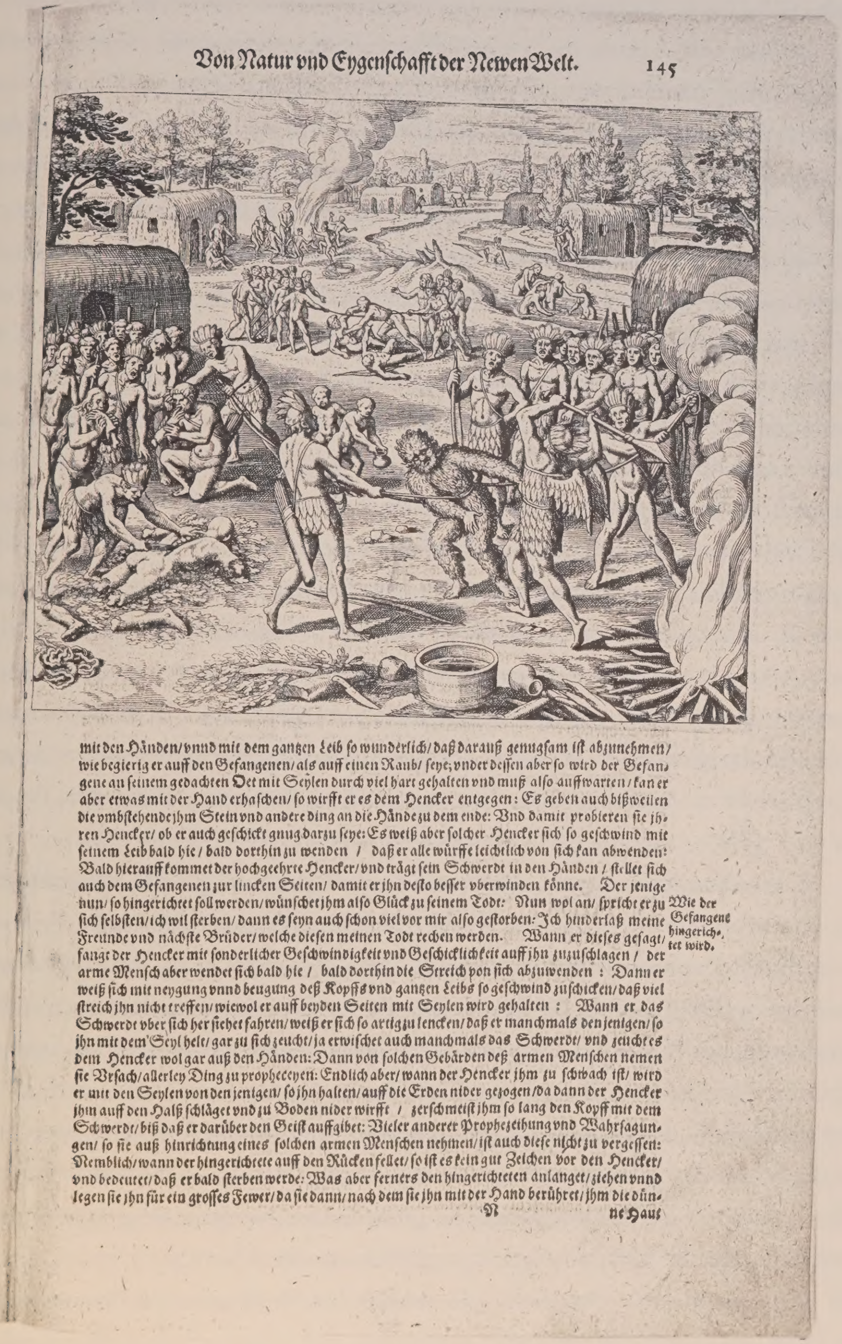
18 Sir John Mandeville. *The voyages & travels of Sir John Mandeville.* London: R. Scot, T. Basset, J. Wright, and R. Chiswel, 1684.

Similar to *The Travels of Marco Polo*, the stories of *The Book of John Mandeville* have appealed to the imagination of readers across generations. One such reader is Christopher Columbus, who consulted and annotated the 1485 Latin edition of Marco Polo and probably read the popular story of Mandeville in one of the thirty-seven editions available in the late fifteenth century.[150] In general terms, *The Book of John Mandeville* is a fictional travel journey to the Holy Land, India, and Cathay, and was compiled around 1356 by an English knight whose real identity eludes any kind of factual reference.[151] The book was evidently very popular in the late medieval period, for almost three hundred manuscript versions survive in at least twelve European languages to this day.[152] Mandeville's textual journey to the Holy Land and the Far East brings together numerous medieval sources that are still known today, mainly the *Relatio* (1330) or missionary travels of the Franciscan friar Odoric of Pordenone (1286–1331) and the pilgrimage of the Dominican William of Boldensele (ca. 1285–1338?) in his *Itinerarius* (1336).[153] As a compiler, Mandeville prefers fantasy to reality in crafting a travel narrative that takes readers to 'many divers kingdoms and countries and isles towards the east part of the world' where they will find the sciapods, cynocephali, epiphagi, cyclopes, among other Plinian monsters.[154] Even more popular than *The Book of Marco Polo*, this fictional account was not so much favoured in the writings of humanist scholars or geographers as it was inspiring to readers who discovered the marvels and monsters of the East beyond the boundaries of this region.[155] *The Book of John Mandeville* exhibits an exotic vision of the East in its diverse displays of marvels and monsters, as well as in its observations on Eastern religious practices from a Christian frame of reference.[156]

The travel narratives of the fifteenth and sixteenth centuries extended the life of the medieval monsters of the East by becoming the new authorities on such things.[157] In the journal of the First Voyage of 1492 and in the *Letter to Luis de Santángel* of April of 1493, Columbus becomes the first European to write about monsters in the New World.[158] On 4 November 1492, he records in his journal second-hand stories of 'one-eyed peoples' somewhere far in Hispaniola in addition to recounting tales of 'peoples with dog's snouts who eat men and drink their blood.'[159] Monstrous peoples like the monoculi and the cynocephali, both described and illustrated in this early-modern edition of *The Voyages & Travels of Sir John Mandeville,* reside among the natives of the Americas according to Columbus's writings. Whether Columbus actually read or found inspiration in Marco Polo or Mandeville in preparation for his journeys to the 'East' is not as significant as the fact that he was the guiding light that transported the medieval monsters to the shores and lands of the New World. As a result, subsequent European explorers and writers imagined a similar exotic world of marvels and monsters as they encountered the striking realities of the Americas in their journeys.

19 Johann Ludwig Gottfried (ca. 1584–1633). *Newe Welt und Americanische Historien*. Frankfurt: Merianische Erben, 1655.

The Flemish engraver and publisher Theodor de Bry (1528–1598) journeyed across vast territories of the world without ever leaving his workshop in Frankfurt where he published his instrumental collection of travel narratives between 1590 and 1634.[160] *India Occidentalis* and *India Orientalis* comprise nearly fifty first-hand accounts of European explorers in the Americas and Asia compiled in twenty-seven volumes, all of which are illustrated with engravings of the encounters between Europeans and the diverse inhabitants and natural beauty of these regions during the Age of Exploration.[161] In these compilations, European readers, comprised largely of educated and mercantile classes, experienced the notion of the noble savage for the first time. They also witnessed the



Von Natur vnd Eygenſchafft der Newen Welt. 145

mit den Händen/ vnnd mit dem gantzen Leib ſo wunderlich/ daß darauß genugſam iſt abzunehmen/ wie begierig er auff den Gefangenen/ als auff einen Raub/ ſeye; vnder deſſen aber ſo wird der Gefangene an ſeinem gedachten Ort mit Seylen durch viel hart gehalten vnd muß alſo auffwarten/ kan er aber etwas mit der Hand erhaſchen/ ſo wirfft er es dem Hencker entgegen: Es geben auch bißweilen die vmbſtehende jhm Stein vnd andere ding an die Hände zu dem ende: Vnd damit probieren ſie jhren Hencker/ ob er auch geſchickt gnug darzu ſeye: Es weiß aber ſolcher Hencker ſich ſo geſchwind mit ſeinem Leib bald hie / bald dorthin zu wenden / daß er alle würffe leichtlich von ſich kan abwenden: Bald hierauff kommet der hochgeehrte Hencker/ vnd trägt ſein Schwerdt in den Händen / ſtellet ſich auch dem Gefangenen zur lincken Seiten/ damit er jhn deſto beſſer vberwinden könne. Der jenige nun/ ſo hingerichtet ſoll werden/ wünſchet jhm alſo Glück zu ſeinem Todt: Nun wol an/ ſpricht er zu ſich ſelbſten/ ich wil ſterben/ dann es ſeyn auch ſchon viel vor mir alſo geſtorben: Jch hinderlaß meine Freunde vnd nächſte Brüder/ welche dieſen meinen Todt rechen werden. Wann er dieſes geſagt/ fangt der Hencker mit ſonderlicher Geſchwindigkeit vnd Geſchicklichkeit auff jhn zuzuſchlagen / der arme Menſch aber wendet ſich bald hie / bald dorthin die Streich von ſich abzuwenden : Dann er weiß ſich mit neygung vnnd beugung deß Kopffs vnd gantzen Leibs ſo geſchwind zuſchicken/ daß viel ſtreich jhn nicht treffen/ wiewol er auff beyden Seiten mit Seylen wird gehalten : Wann er das Schwerdt vber ſich her ſiehet fahren/ weiß er ſich ſo artig zu lencken/ daß er manchmals den jenigen/ ſo jhn mit dem Seyl helt/ gar zu ſich zeucht/ ja erwiſchet auch manchmals das Schwerdt/ vnd zeucht es dem Hencker wol gar auß den Händen: Dann von ſolchen Gebärden deß armen Menſchen nemen ſie Vrſach/ allerley Ding zu propheceyen: Endlich aber/ wann der Hencker jhm zu ſchwach iſt/ wird er mit den Seylen von den jenigen/ ſo jhn halten/ auff die Erden nider gezogen/ da dann der Hencker jhm auff den Halß ſchläget vnd zu Boden nider wirfft / zerſchmeiſt jhm ſo lang den Kopff mit dem Schwerdt/ biß daß er darüber den Geiſt auffgibet: Vieler anderer Prophezeihung vnd Wahrſagungen/ ſo ſie auß hinrichtung eines ſolchen armen Menſchen nehmen/ iſt auch dieſe nicht zu vergeſſen: Nemblich/ wann der hingerichtete auff den Rücken fellet/ ſo iſt es kein gut Zeichen vor den Hencker/ vnd bedeutet/ daß er bald ſterben werde: Was aber ferners den hingerichteten anlanget/ ziehen vnnd legen ſie jhn für ein groſſes Fewer/ da ſie dann/ nach dem ſie jhn mit der Hand berühret/ jhm die dün-

Wie der Gefangene hingerichtet wird.

N ne Haut

19 Engraving from *Newe Welt und Americanische Historien* (1655).

cruelty of the conquistadores towards the inhabitants of the New World, learned about the exotic nature of these newly 'discovered' lands, and faced the gruesome yet improbable accounts of cannibalism among the natives.[162] If the goal of the publishers was to further the interest of readers in the realities and myths of the New World, de Bry's firm clearly understood the value of presenting sensational images alongside recent travel reports, set within the framework of the publishing practices of the sixteenth century.[163]

In a sort of semantic encounter, the word 'cannibal' derives from the Arawak *caniba* or *cariba*, a term used to identify the enemy tribes of the Arawaks, and purposely relates to the Latin word *canis* (dogs) as well.[164] For navigators like Columbus or Vespucci, the meaning of this word rapidly became tangled in a net of stories and expectations of monstrous peoples within the boundaries of European civilization.[165] So to unravel this complex semantic association, the origin of the cannibal-monster of the New World conveniently traced its roots to familiar stories of the dog-headed peoples in Asia and Africa with a long lineage in the classical and medieval traditions.[166] The consequence for the textual and visual representations of the Other in these narratives was profound: the Other was often portrayed as an imaginary subject, existing only in stories with neither agency nor voice. In this sense, it is necessary to note that the Other present in these narratives of encounters is not a real human subject but a concept forged by some Europeans in the business of empire.[167] In the end, the figure of the cannibal was transformed into a strategic discourse in numerous travel narratives to limit the Other—Indigenous Peoples and their religions, cultures, and identities—within the confines of monstrosity.

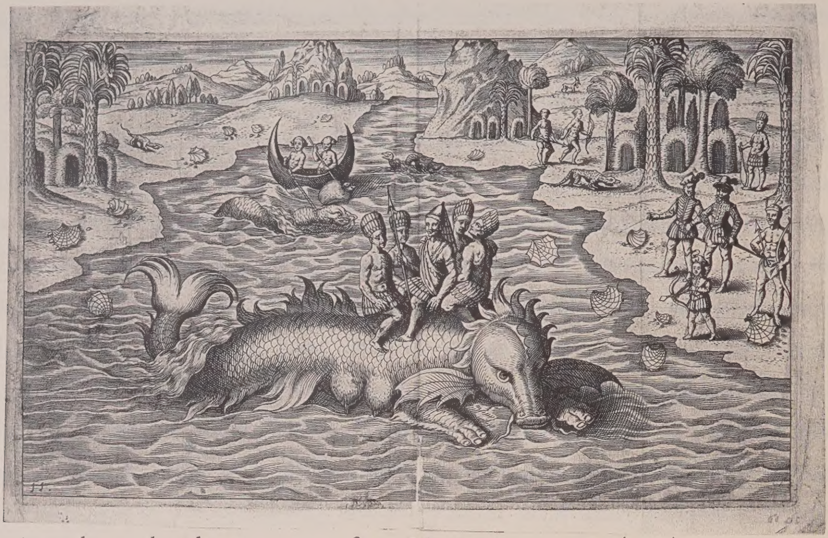
In the same way Columbus promoted the perception of cannibalism within the discourse of monstrosity in the New World, de Bry's engravings accompanying the travel journeys of Columbus and other explorers also played a key role in this matter.[168] Indeed, readers across Europe saw in these collections the most iconic representations of cannibalism in the New World.[169] De Bry based most of these depictions on a popular account, published with woodcuts from the 1550s, of German explorer Hans Staden (ca. 1525–ca. 1576) in which he describes his voyages and captivity among the Tupinambá people of Brazil.[170] Not only did Europeans use these engravings to distinguish themselves from the colonized subjects, but the images and the stories also supported the religious and moral justifications for the European imperial expansion into the Americas.[171]

Three decades after the death of Theodor de Bry, the engraver Matthaeus Merian the Elder (1593–1650) entered into a partnership with editor-scholar Johann Ludwig

Gottfried (ca. 1584–1633) to publish an abridged folio edition of the fourteenth volume of de Bry's *India Occidentalis*.[172] Merian and Gottfried had access to the published texts and to many of the original six hundred engravings that had appeared in earlier editions, including the notorious depictions of controversial scenes of human sacrifice, idolatry, marvels, exotic creatures, and, as one might expect, cannibalism.[173] First published in 1631 under the title *Antipodum oder Newe Welt* and later available in this second edition of 1655, both volumes followed the editorial vision of the original collection by showing readers the fantastic nature of the New World and illustrating with precision the Otherness of its inhabitants.[174] One engraving in particular demonstrates the publisher's taste for the sensational interpretations of the traveller's journeys in the Americas.[175] This new engraving, published as part of the third volume of the *Americas* series between 1592 and 1593, appears in the abridged editions as a single visual narrative, taken from several scenes initially printed as individual plates in the account of Hans Staden.[176] In it, a monstrous creature replaces the original depiction of the Tupinambá capturing a member of an enemy tribe. This new scene takes place against the backdrop of a feast of human flesh, drawing upon an earlier engraving as a source.[177] This example demonstrates a preference for the exotic and, in some cases, the monstrous as a method to captivate readers by means of the visual stories told in these popular engravings. Although neither Theodor de Bry nor his pupils ever set foot in the Americas, their engravings illustrated almost every region of the continent and left visible impressions on the European conception of the New World.[178]

20 **Honorius Philoponus (1556–1627).** ***Nova typis transacta navigatio novi orbis Indiae Occidentalis*****. Linz, 1621.**

A strong commitment to the Christian faith encouraged European missionaries to deliver their message to populations around the world during the Age of Exploration. At the time of Columbus's Second Voyage to the Americas (1493–1496), the Benedictine Bernardo Boyl (ca. 1440–ca. 1507) arrived at Hispaniola, in the company of other monks, with a mission from the Spanish crown to improve the treatment of Indigenous Peoples.[179] Aside from celebrating the first recorded Mass in the Americas on 6 January 1494, Boyl's overall contribution to the religious life of the island was minimal given his early departure for Spain that same year.[180] However, the compiler of this apologia for the conversion of Indigenous Peoples to Christianity refers to the Benedictine as the 'first American apostle.'[181]

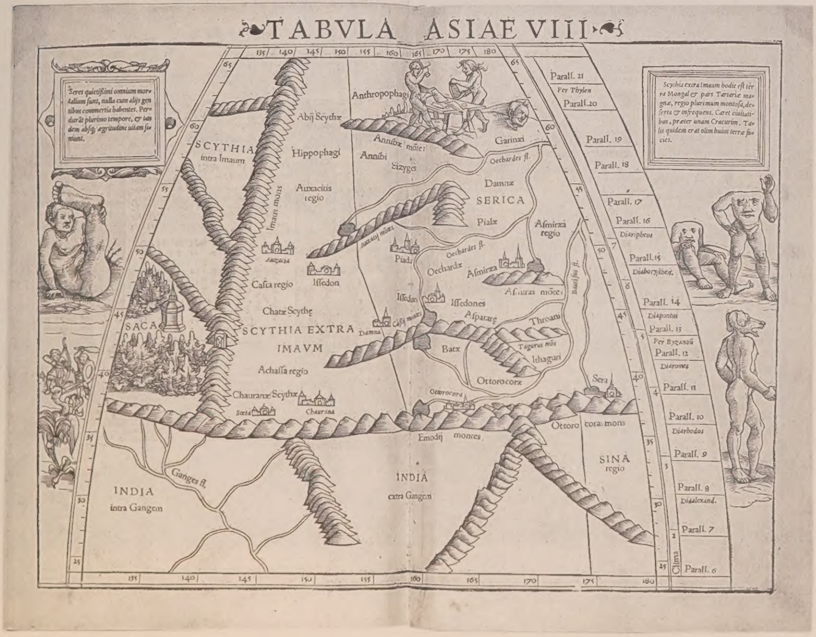


20 Arawak people riding a manatee from *Nova typis transacta* (1621).

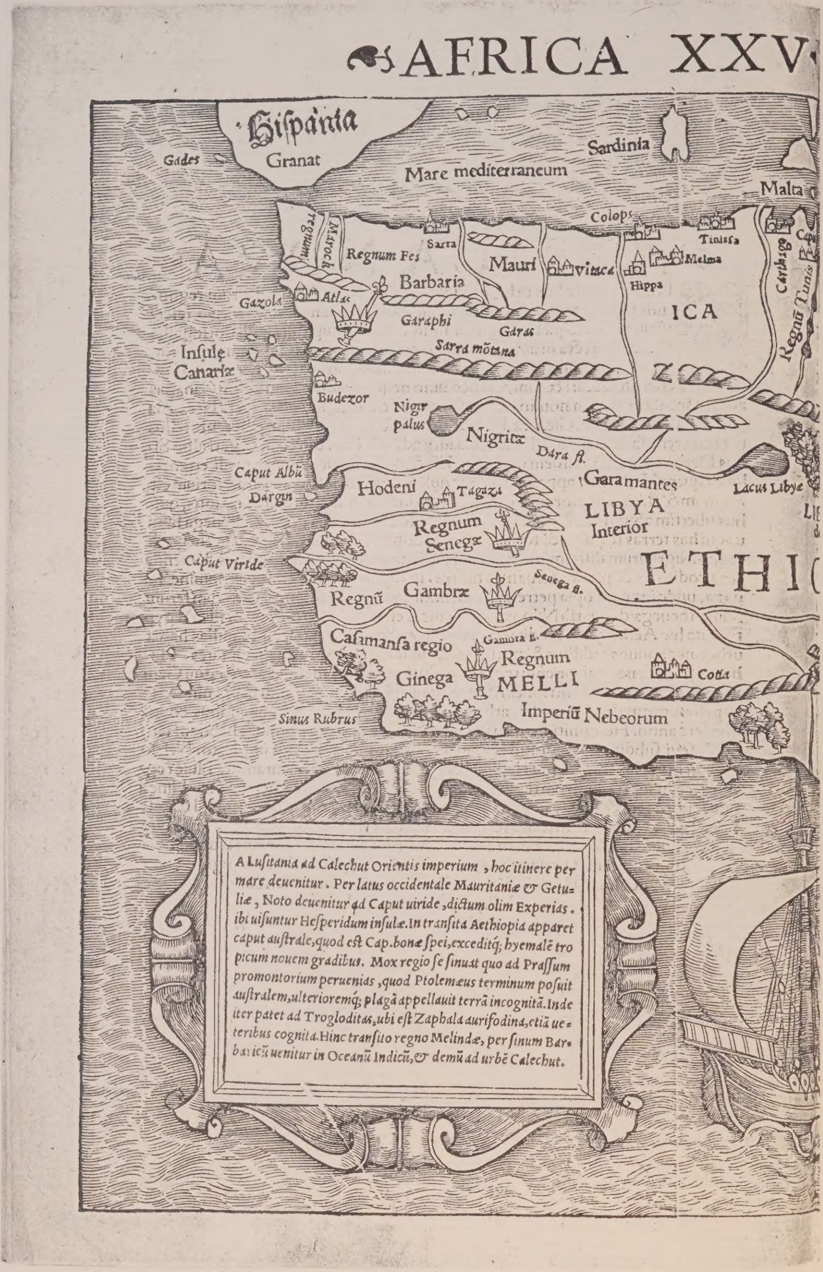
The author of this relation is another Benedictine monk, Caspar Plautus, who wrote under the pseudonym Honorius Philoponus.[182] The *Nova typis transacta navigatio novi orbis Indiae Occidentalis* is a partial history of the Benedictine missions and a compilation of other travel accounts, principally those of Peter Martyr d'Anghiera (1457–1526) and Francisco López de Gómara (ca. 1511–1566).[183] The relation contains several woodcuts of nautical diagrams and nineteen engravings, most of which are modeled after the aesthetic of Theodor de Bry's illustrations to the *Americas* collection.[184] Each engraving illustrates a series of stories about encounters between Europeans and Indigenous Peoples amid the introduction of Christianity to the New World. One of the first engravings harkens back to the legendary medieval journey of St Brendan to the Isle of the Blessed, illustrated with the episode of the Mass celebrated on the fantastic 'Whale Island.'[185] What follows is a sequence of representations accentuating the differences between Europeans and the culture of the inhabitants as well as the nature of the Caribbean. Several engravings depict cannibalism and idolatry as a trope for the urgency of religious conversion of indigenous populations while others illustrate the natural world as monstrous. In the case of the manatee, the compiler cites López de Gómara's *Historia general de las Indias* (1552) to relate the story of the domestication of the marine mammal by the Arawak people, depicted in an engraving as a creature of monumental proportions surrounded by other sea monsters and exotic creatures.[186]

21 Claudius Ptolemy (ca. 100–ca. 170 A.D.). *Geographia universalis.* Basel: Heinrich Petri, 1545.

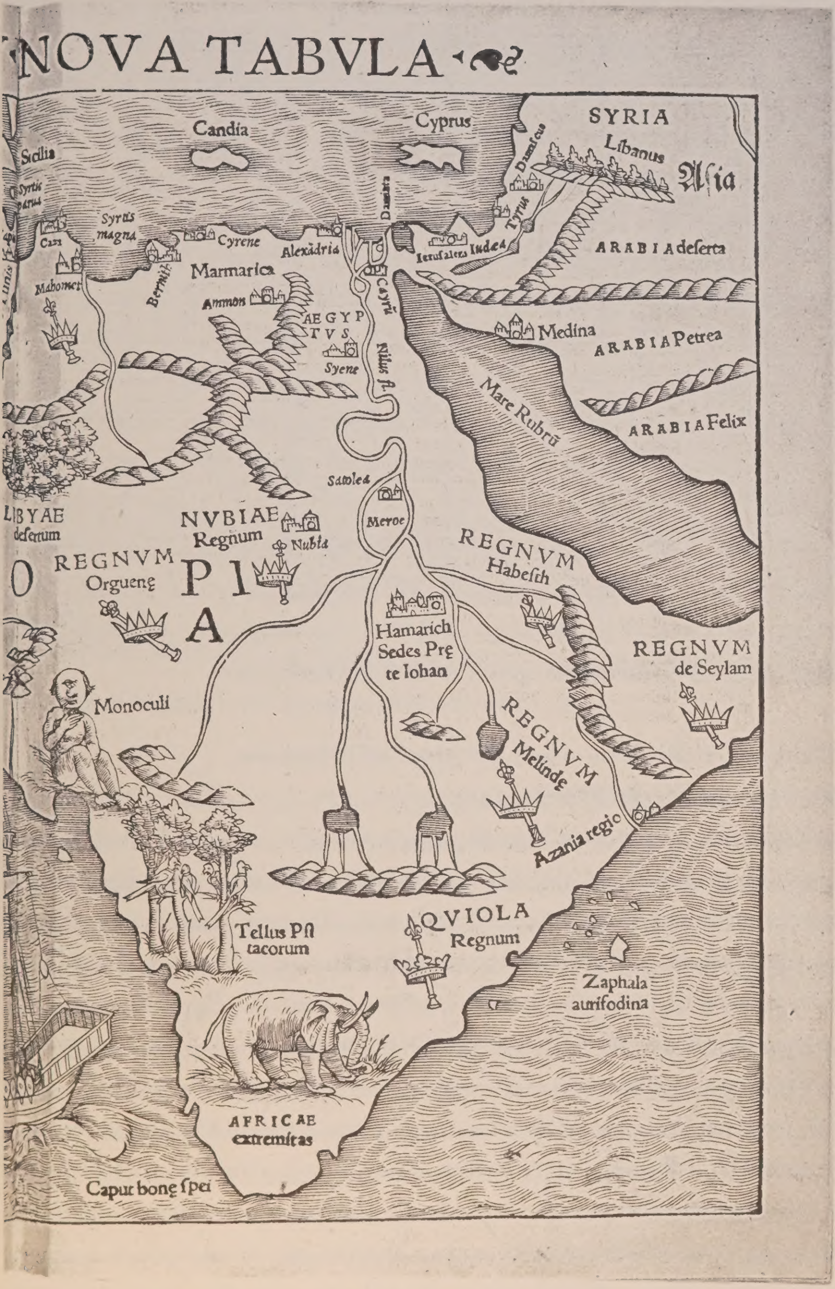
Renaissance geographers turned to extant works of ancient authors in search of cartographic methods to represent the known world and the geographical encounters of the late fifteenth century.[187] At the end of the fourteenth century, Ptolemy's second-century *Geographia* (or *Cosmographia*) reached a new generation of readers after centuries of neglect in most medieval treatises on geography.[188] By the time the Renaissance polymath Sebastian Münster issued his edition of Ptolemy's *Geographia universalis* in 1540, humanist scholars had been commissioning manuscript copies of the work for decades and cartographers had already applied Ptolemy's mathematical geography to mapmaking during the first half of the fifteenth century.[189] After the invention of printing with movable type in the 1450s, some seventeen incunable editions of the *Geographia* contained a considerable percentage of the early printed maps available to readers before the turn of the century.[190] Münster's edition of the *Geographia* established this ancient work as a primary source on geography in the sixteenth century with five editions published between 1541 and 1552.[191]


TABVLA ASIAE VIII
Anthropophagi
Abij Scythæ
SCYTHIA intra Imaum
Hippophagi
Annibi
Garinæi
Damnæ
SERICA
Piala
Imaum mons
Auxacitis regio
Casia regio
Issedon
Issedones
Aspacara
Throana
Chatæ Scythæ
SCYTHIA EXTRA IMAVM
Achassa regio
Chauranæ Scythæ
Batæ
Ottorocoræ
SACA
Emodi montes
Ottoro coras mons
SINA regio
Ganges fl.
INDIA intra Gangem
INDIA extra Gangem
Parall. 21
Per Thylen
Parall. 20
Parall. 19
Parall. 18
Parall. 17
Parall. 16
Parall. 15
Parall. 14
Parall. 13
Parall. 12
Parall. 11
Parall. 10
Parall. 9
Parall. 8
Parall. 7
Parall. 6
Clima

21 Map of Asia from *Geographia universalis* (1545).


AFRICA XXV
Hiſpánia
Granat
Gades
Mare mediterraneum
Sardinia
Malta
Regnum Maroch
Regnum Fes
Sarra
Colops
Tinissa
Mauri
vitaca
Melma
Hippa
Carthago
Regnũ Tunis
Barbaria
Gazola
Atlas
Garaphi
Garas
Sarra mõtana
ICA
Inſulæ Canariæ
Budezor
Nigir palus
Nigritæ
Dara fl.
Caput Albũ
Dargin
Hodeni
Tagaza
Garamantes
LIBYA Interior
Lacus Libyæ
Regnum Senegæ
Caput Viride
ETHI
Senega fl.
Regnũ Gambræ
Gambra fl.
Caſamanſa regio
Regnum MELLI
Ginega
Cotta
Sinus Rubrus
Imperiũ Nebeorum

A Luſitania ad Calechut Orientis imperium , hoc itinere per mare deuenitur. Per latus occidentale Mauritaniæ & Getuliæ, Noto deuenitur ad Caput uiride, dictum olim Experias. ibi uiſuntur Heſperidum inſulæ. In tranſita Aethiopia apparet caput auſtrale, quod eſt Cap. bonæ ſpei, exceditq; hyemalẽ tropicum nouem gradibus. Mox regio ſe ſinuat quo ad Praſſum promontorium peruenias, quod Ptolemæus terminum poſuit auſtralem, ulterioremq; plagã appellauit terrã incognitã. Inde iter patet ad Trogloditas, ubi eſt Zaphala aurifodina, etiã ueteribus cognita. Hinc tranſito regno Melindæ, per ſinum Barbaricũ uenitur in Oceanũ Indicũ, & demũ ad urbẽ Calechut.

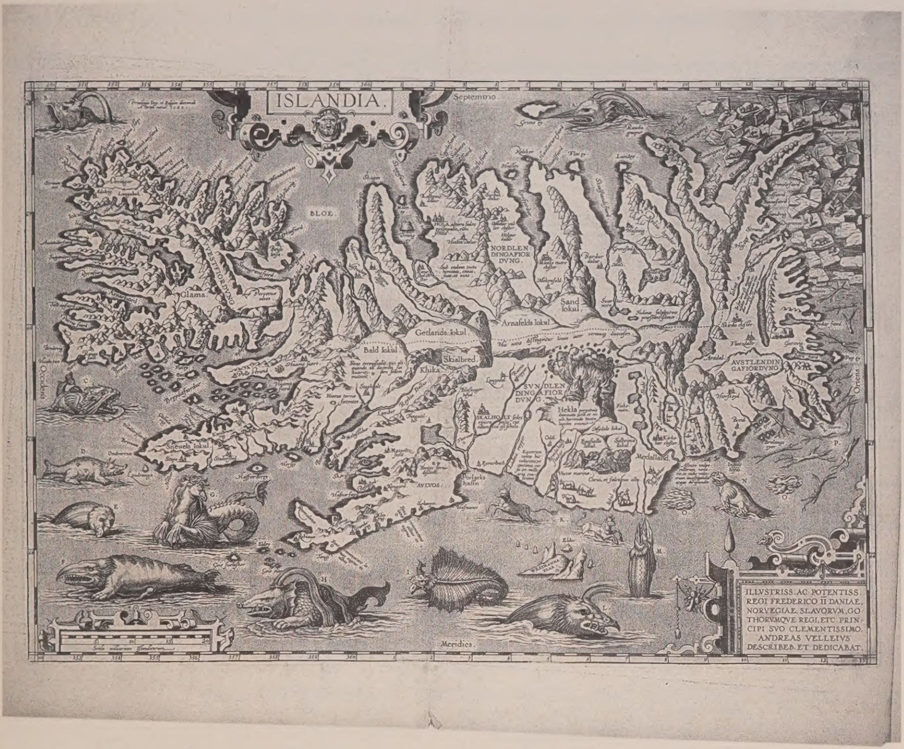

NOVA TABVLA
Candia
Cyprus
SYRIA
Libanus
Aſia
Sicilia
Syrtis parua
Syrtis magna
Cyrene
Alexādria
Damiata
Damaſcus
Tyrus
Iudea
Ieruſalem
ARABIA deſerta
Marmarica
Ammon
Mahomet
Bernik
AEGYPTVS
Syene
Cayrū
Nilus fl.
Medina
ARABIA Petrea
Mare Rubrū
ARABIA Felix
Saaolea
Meroe
LIBYAE deſertum
NVBIAE Regnum
Nubia
REGNVM Orguenę
PI A
REGNVM Habeſth
Hamarich Sedes Prę te Iohan
REGNVM de Seylam
Monoculi
REGNVM Melinde
Azania regio
Tellus Pſi tacorum
QVIOLA Regnum
Zaphala aurifodina
AFRICAE extremitas
Caput bonę ſpei

21 Map of Africa from *Geographia universalis* (1545).

Münster not only consulted the original Greek text but also collated several printed editions of the *Geographia* in preparation for his edition.[192] For all the investigations and first-hand data on the geography and ethnography of every part of the world, Münster belongs to a group of proficient scholars of the Renaissance who still chose to reference classical and medieval ideas of monstrosity in their works.[193] In the same tradition of the early extant manuscript versions of Ptolemy's maps that embraced the monstrous peoples of Pliny in their coordinates, printed editions of Ptolemaic maps also included the medieval marvels within their geographical boundaries.[194] Arguably the most recognizable example of this is Schedel's version of Ptolemy's world map in *The Nuremberg Chronicles*.[195] Münster and other Renaissance authors exploited monsters as commodities that made their writings even more appealing to readers who would have expected to find them in the books, maps, broadsides, and other manuscript and printed materials available for acquisition.[196] This edition of the *Geographia* incorporates fifty-four double-page maps equally divided into ancient and modern, many of which will show up again in Münster's *Cosmographia*.[197] The monoculi in Africa, the remaining Plinian monsters in Asia, sea monsters, as well as the symbolic cannibals of Brazil would all emerge as woodcut illustrations contained within the maps of this ancient compilation of geographical knowledge revived for readers during the period of the Renaissance.

22 Abraham Ortelius (1527–1598). *Theatrum orbis terrarum.* Antwerp: Christophe Plantin, 1595.

Narratives of encounter generated a wealth of geographical sources that fuelled the most significant cartographic representations of the world in the course of the fifteenth and sixteenth centuries. In the case of the publication of the *Theatrum orbis terrarum* in 1570, the renowned Flemish cartographer Abraham Ortelius acquired maps and additional sources from a network of travellers and other collectors leading to the publication of this large volume regarded as the first modern atlas.[198] Ortelius's masterpiece was in high demand from the start. Indeed, the influential publishing firm of Christophe Plantin (ca. 1520–1589) printed four issues of the atlas in 1570 alone, succeeded by a total of thirty-one editions published until 1612.[199] The first edition contained fifty maps while the last edition brought the total to 121, each one produced in the same format along with descriptions of the maps assembled by author from a variety of sources.[200] Recognized during his lifetime as a great collector of books, maps, art, and antiquities, Ortelius had access to


ISLANDIA.
Septemtrio
Meridies
Occidens
Oriens
NORDLENDINGAFIORDVNG.
SVNDLENDINGAFIORDVNG.
AVSTLENDINGAFIORDVNG.
VESTFIORDVNG
Hekla
Skalholt
Olama
Arnafelds Iokul
Geitlands Iokul
Bald Iokul
Skialbred
Kluka
Sand Iokul
Snevels Iokul
Medalland
BLOE
ILLVSTRISS. AC POTENTISS. REGI FREDERICO II DANIAE, NORVEGIAE, SLAVORVM, GOTHORVMQVE REGI, ETC. PRINCIPI SVO CLEMENTISSIMO. ANDREAS VELLEIVS DESCRIBEB. ET DEDICABAT.

22 Map of Islandia from *Theatrum orbis terrarium* (1595).

4,971 maps (including 3,221 of his own production), nearly three thousand books, and one hundred manuscripts.[201] In the posthumous edition of the *Theatrum orbis terrarum* of 1601, he cites the works of 182 authorities on cartography,[202] whereas on the subject of sea monsters, he draws inspiration from the *Carta marina* of 1539 by the Swedish scholar Olaus Magnus (1490–1557) and a didactic Old Norse tale from the mid-thirteenth century.[203]

The first accurate map of Iceland for the standards of the period contains a selection of sea monsters emerging from the pages of the works of Olaus and Münster.[204] The shark (I) and the ziphius (E) are taken from the *Carta marina*; the description of the sea hog (D) derives from Olaus's *Historia*; and the roider (B) and the 'kraken' (H) are inspired by the Old Norse tale *The King's Mirror*.[205] Unlike Olaus and Münster, the visual representations of the monsters in this map are in some ways more realistic and Ortelius identifies most creatures by name and even provides brief descriptions for each one.[206]

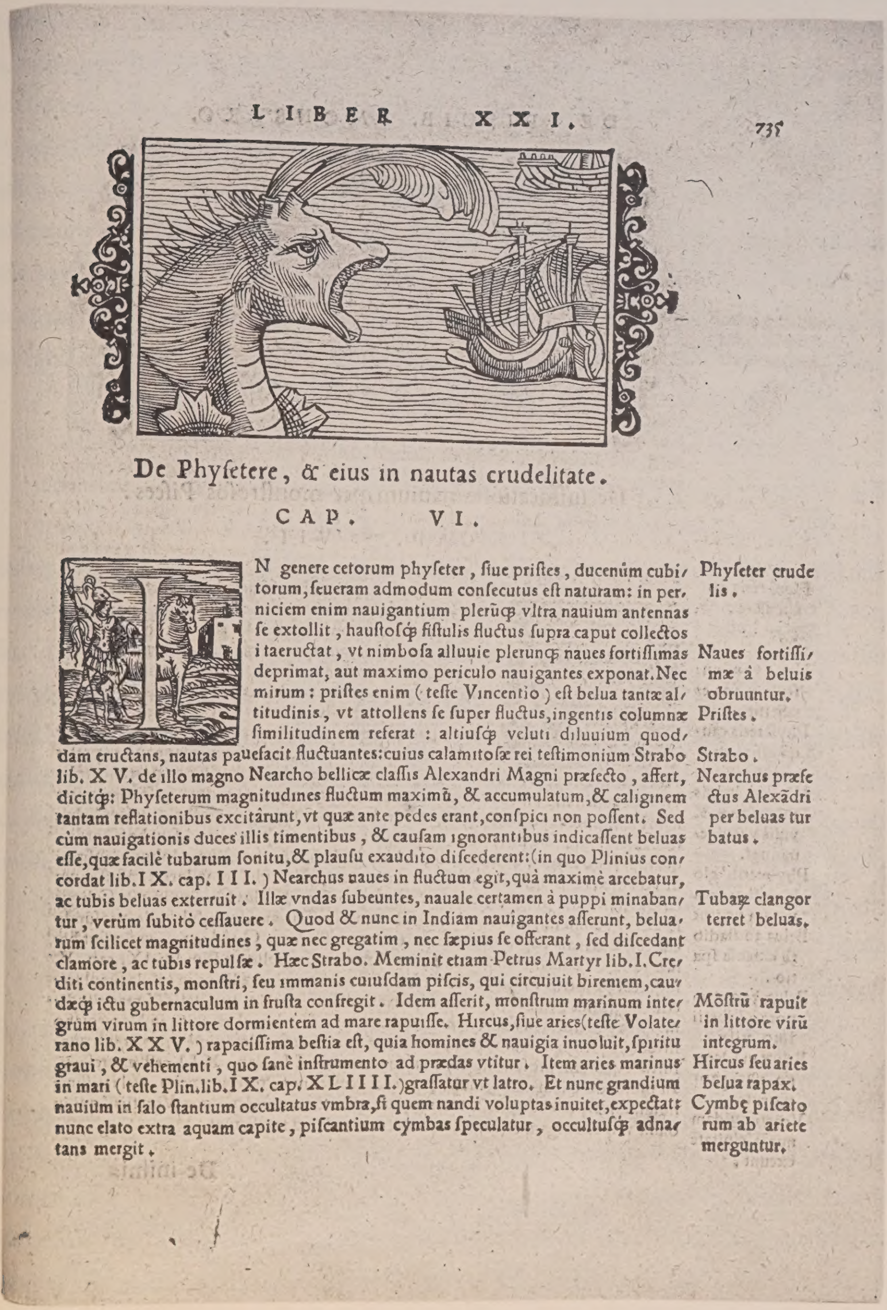
Opened to this specific map, contemporary owners of the Ortelius atlas would have encountered the latest advances in cartography engraved on its pages, along with the perennial myths about sea monsters collected from all sorts of authoritative sources within Renaissance scholarship.

23 Olaus Magnus (1490–1557). *Historia de gentibus septentrionalibus.* Rome: Giovanni Maria Viotti, 1555.

The majority of depictions of sea monsters in medieval and renaissance maps frequently make reference to stories which originate in sources outside the maps they actually illustrate.[207] Besides the Ortelius map of Iceland, two examples that demonstrate this fact are the world maps of Schedel and Münster in their *Liber chronicorum* and *Geographia*, respectively. The work of the cartographer and historian Olaus Magnus is one exception because he introduces original textual and visual material to supplement his influential writings on sea monsters in northern Europe.[208] Olaus learned many of the stories on sea monsters from sailors and fishermen in the course of his journeys through Northern Europe, during which he also took note of the illustrations found in the natural history encyclopedia *Hortus sanitatis* (1491), and the *Carta marina* (1516) of Martin Waldseemüller (1470–1520).[209] Together, the *Carta marina* of 1539—extant in just two copies—and the *Historia de gentibus septentrionalibus* of 1555 are the most prominent sources on sea monsters of the sixteenth century.[210]

First published in Rome in 1555 and edited by Christophe Plantin in 1558 and 1562, the book was significantly popular, with several abridged editions and translations appearing until the mid-seventeenth century. This first edition of Olaus's most important work recounts the history of the northern peoples in twenty-two books and 778 chapters accompanied by more than 480 woodcut illustrations. The book embraces a variety of topics that include the systems of politics and religions of the peoples of the north as well as their folklore, customs, medicine, inventions, and prodigies.[211] Olaus wrote this book while in exile in Rome and even set up a printing press with the purpose of educating readers of the period on the history of northern Europe as part of his endless campaign to bring his native Sweden back to Catholicism.[212]

Olaus devotes two books and several sections of the *Historia de gentibus septentrionalibus* to sea monsters, which he defines as wonders of nature in the same tradition of earlier and contemporary authors on this subject.[213] 'The vast ocean,' he writes, 'offers a



De Phyſetere, & eius in nautas crudelitate.

CAP. VI.

IN genere cetorum phyſeter, ſiue priſtes, ducenûm cubitorum, ſeueram admodum conſecutus eſt naturam: in perniciem enim nauigantium plerũꝗ vltra nauium antennas ſe extollit, hauſtoſꝗ fiſtulis fluctus ſupra caput collectos i taeructat, vt nimboſa alluuie plerunꝗ naues fortiſſimas deprimat, aut maximo periculo nauigantes exponat. Nec mirum: priſtes enim (teſte Vincentio) eſt belua tantæ altitudinis, vt attollens ſe ſuper fluctus, ingentis columnæ ſimilitudinem referat: altiuſꝗ veluti diluuium quoddam eructans, nautas pauefacit fluctuantes: cuius calamitoſæ rei teſtimonium Strabo lib. X V. de illo magno Nearcho bellicæ claſſis Alexandri Magni præfecto, affert, dicitꝗ: Phyſeterum magnitudines fluctum maximũ, & accumulatum, & caliginem tantam reflationibus excitârunt, vt quæ ante pedes erant, conſpici non poſſent. Sed cùm nauigationis duces illis timentibus, & cauſam ignorantibus indicaſſent beluas eſſe, quæ facilè tubarum ſonitu, & plauſu exaudito diſcederent: (in quo Plinius concordat lib. I X. cap. I I I.) Nearchus naues in fluctum egit, quà maximè arcebatur, ac tubis beluas exterruit. Illæ vndas ſubeuntes, nauale certamen à puppi minabantur, verùm ſubitò ceſſauere. Quod & nunc in Indiam nauigantes aſſerunt, beluarum ſcilicet magnitudines, quæ nec gregatim, nec ſæpius ſe offerant, ſed diſcedant clamore, ac tubis repulſæ. Hæc Strabo. Meminit etiam Petrus Martyr lib. I. Crediti continentis, monſtri, ſeu immanis cuiuſdam piſcis, qui circuiuit biremem, caudæꝗ ictu gubernaculum in fruſta confregit. Idem aſſerit, monſtrum marinum integrum virum in littore dormientem ad mare rapuiſſe. Hircus, ſiue aries (teſte Volaterano lib. X X V.) rapaciſſima beſtia eſt, quia homines & nauigia inuoluit, ſpiritu graui, & vehementi, quo ſanè inſtrumento ad prædas vtitur. Item aries marinus in mari (teſte Plin. lib. I X. cap. X L I I I I.) graſſatur vt latro. Et nunc grandium nauium in ſalo ſtantium occultatus vmbra, ſi quem nandi voluptas inuitet, expectat: nunc elato extra aquam capite, piſcantium cymbas ſpeculatur, occultuſꝗ adnatans mergit.

Phyſeter crudelis.

Naues fortiſſimæ à beluis obruuntur.

Priſtes.

Strabo.

Nearchus præfectus Alexãdri per beluas turbatus.

Tubaꝝ clangor terret beluas.

Mõſtrũ rapuit in littore virũ integrum.

Hircus ſeu aries belua rapax.

Cymbę piſcatorum ab ariete merguntur.

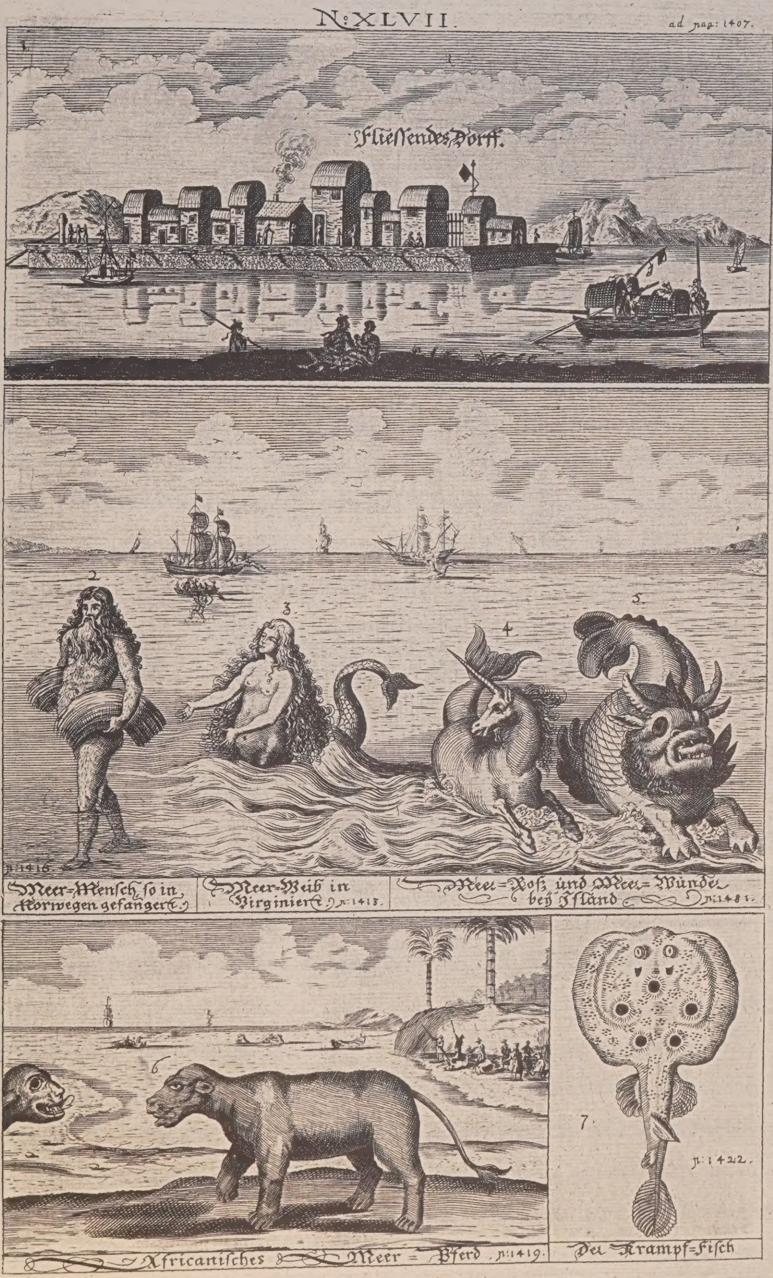
23 ‘Prister’ from *Historia de gentibus septentrionalibus* (1555).

wonderful spectacle to every nation in its waters.' Such spectacle includes sea monsters dangerous to sailors and fishermen; it also covers creatures whose monstrous appearance differs from their benign nature, and deals with the traditional notion of monsters as prodigies.[214] The 'prister,' known to represent actual whales or sharks, is an example of a composite horse-reptile creature of the sea with great power and capable of destruction.[215] With a long tradition in European imagination, the *Historia de gentibus septentrionalibus* conceived and illustrated the Norwegian and Northern Seas as places of monstrous encounters. Olaus's specific descriptions of creatures like sea unicorn and sea serpent, the polypus, and other monsters of the deep ultimately went on to influence the writings of numerous Renaissance scholars and, more importantly, inform the popular readings on the sea as a bottomless source of monstrosity.

24 **Erasmus Francisci (1627–1694).** ***Ost und West Indischer wie auch Sinesischer Lust- und Stats Garten*****. Nürnberg: Johann Andreæ, 1668.**

The first scholarly journal to circulate in Germany, the *Miscellanea curiosa*, began publication in 1670 as a venue for physicians and natural philosophers to explore curiosities in the nature of monsters, marvels, medical cases, natural specimens, antiquities, and more.[216] This periodical was published in the midst of a rise in popularity of newspapers, miscellanies, compendia of natural history and occult sciences, and other books delving into the culture of collecting curiosities in seventeenth-century Germany.[217] Erasmus Finx, known also as Erasmus Francisci, was a German polymath and author of several popular compilations of historical, scientific, and fictional curiosities and wonders reported around the world.[218] His main contribution to this field of knowledge was to distill the vast amount and variety of information into equally large volumes that were very useful to scholars and that appealed to amateur readers at the same time.[219]

An unlimited desire for knowledge combined with a culture of collecting curiosities laid the foundation for the development of institutional and personal museums, libraries, and cabinets of curiosities during the early modern period.[220] Francisci projected a vision of the world inspired by this culture and by the very 'exotic' objects and 'curious' stories that he collected for his popular compendia of curiosities. In the preface to his second compilation on the East and West Indies and Asia, he lists an impressive collection of more than 250 sources of natural history, travel accounts, geographies, and general histories. Divided into three parts, the first two cover the natural history of the Indies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ad pag: 1407.
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Meer=Menſch ſo in Norwegen gefangen.
Meer=Weib in Virginien p:1413.
Meer=Roſz und Meer=Wunder bey Iſland p:1481.
6
Africaniſches Meer=Pferd p:1419.
7
p:1422.
Der Krampf=Fiſch

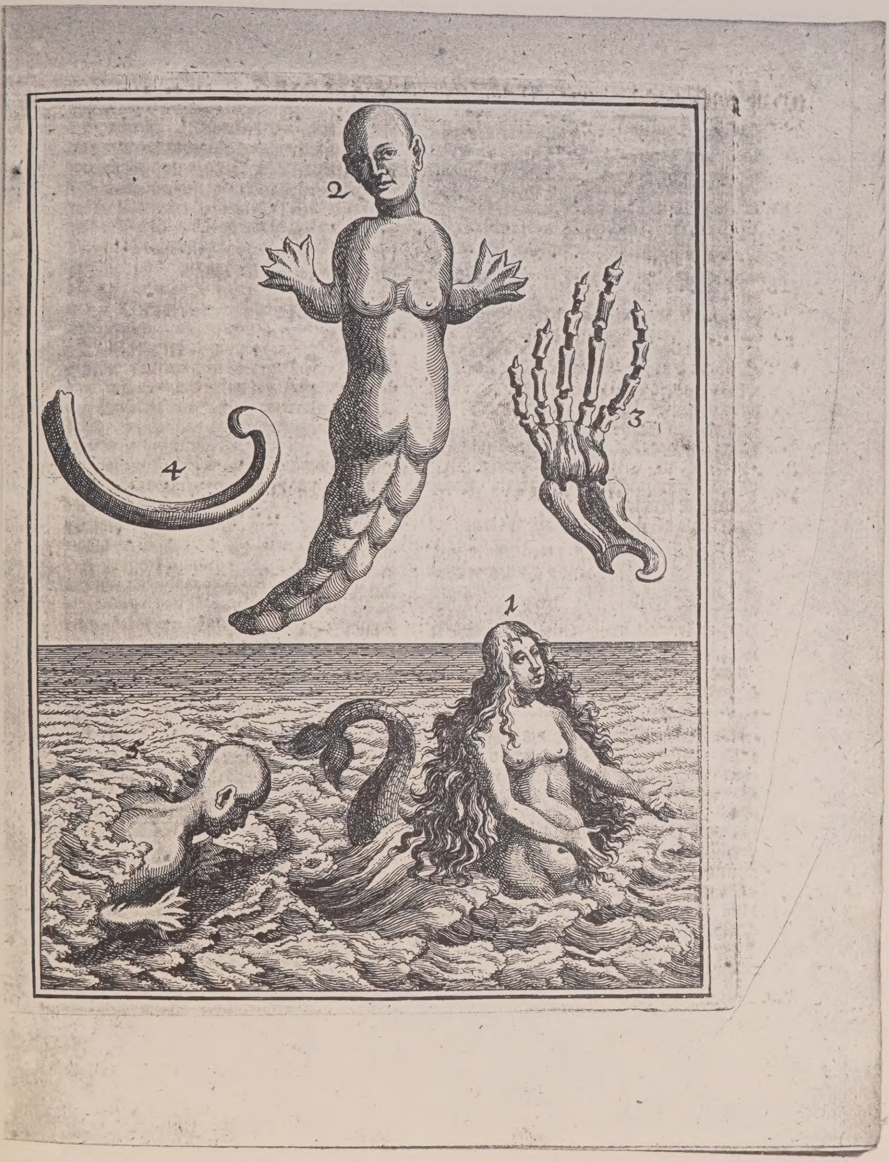
24 Sea monsters and mermaid from *Ost und West Indischer* (1668)

with a focus on the exotic creatures and monsters of these regions. The third deals with the Indigenous Peoples of America and the East Indies, their cultures, religions, forms of government, as well as their 'exotic' nature.[221] When readers encounter Francisci's outstanding collection of sources, they are in the presence of a cabinet of curiosities, or *Wunderkammer*, manifested in print. Almost every subject of Renaissance collecting—from specimens of natural history to monsters and wonders of every kind—is displayed over 1762 pages of text with sixty-five engraved plates arranged by an author who is described as a 'prolific popularizer of the world lore of infinite varieties.'[222] His formula for instructing and amusing readers within the confines of his compendia was so successful that Francisci managed to live solely off the profits generated from his writings on curiosities and wonders published in the seventeenth century.[223]

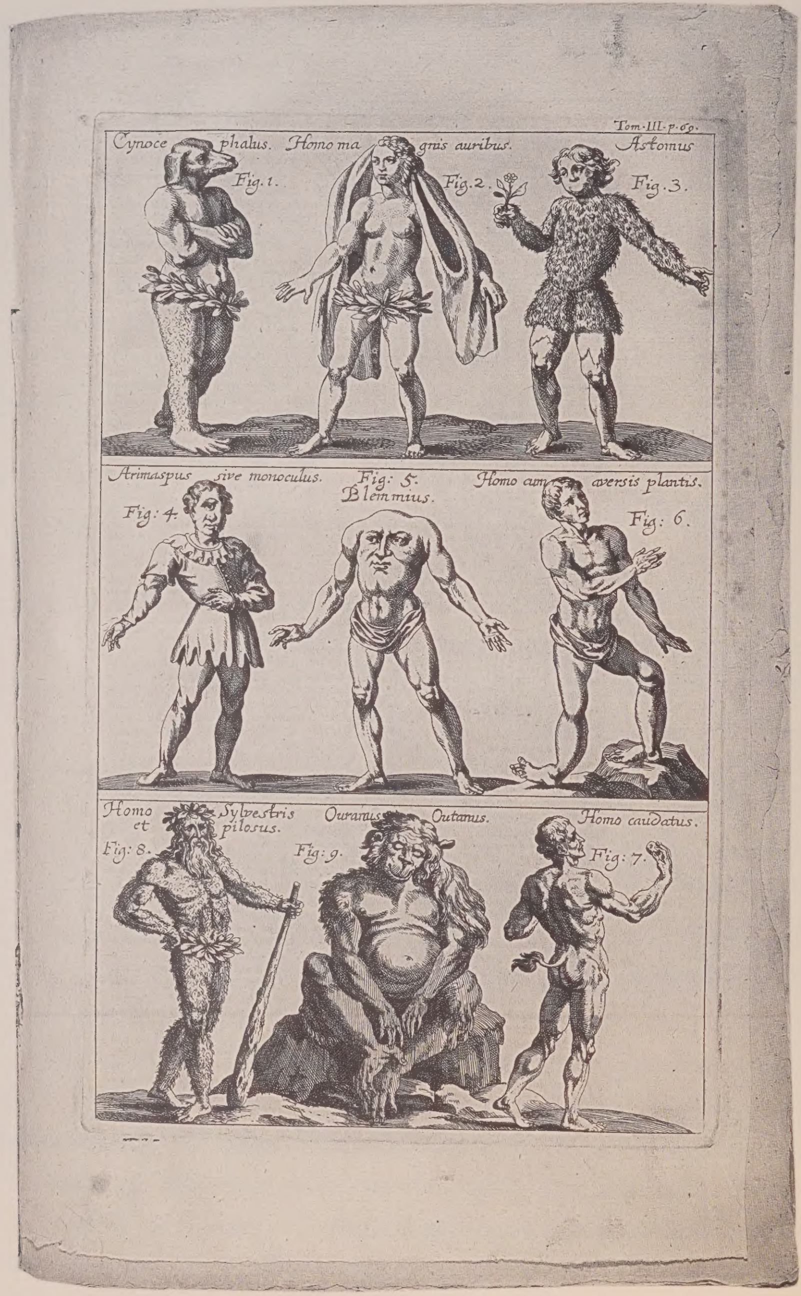
25 Eberhard Werner Happel (1647–1690). *Gröste Denckwürdigkeiten der Welt oder sogennante Relationes Curiosae.* Hamburg: Thomas von Wiering, 1683–1691.

Erasmus Francisci and Eberhard Werner Happel were the most prolific German authors on the subject of curiosities and wonders in the seventeenth century.[224] Like Francisci, Happel was a polymath and an advocate of the exotic as a profitable method to explain and display the Otherness of peoples, cultures, and societies which was the focus of his writings.[225] Happel published a corpus of twenty 'polymathic' novels and five books of wonders, including the *Thesaurus exoticorum* (1688) and the *Relationes curiosae* (1683–1691).[226] His endless novels and lengthy historical compendia transported readers to almost every corner of the globe with descriptions that combined fact and fiction, along with the author's own interpretations.[227] Like Francisci in Nuremberg, Happel was able to gain access to great collections of books in public and private collections and, even more, he exploited the rich print culture of news publishing in Hamburg to write the historical content of his novels and to gather material for his news compilations.[228]

In *Relationes curiosae*, Happel favours a worldview drawn from news of all types of events occurring over the course of the European expansion into America, Africa, and Asia in search of lands, commodities, and peoples to be introduced (and subdued) into the domains of the emerging Colonial infrastructures.[229] This is the historical context for the print version of Happel's collection of curiosities within which he writes about sea monsters with the same pen that he uses to sketch descriptions of monstrous peoples, strange natural phenomena; and exotic products from faraway lands. Published in five



25 Mermaids from *Relationes curiosae* (1683-1691).


Tom·III·p·69.
Cynoce phalus.
Fig. 1.
Homo ma gnis auribus.
Fig. 2.
Astomus
Fig. 3.
Arimaspus sive monoculus.
Fig: 4.
Fig: 5.
Blemmius.
Homo cum aversis plantis.
Fig: 6.
Homo et Sylvestris pilosus.
Fig: 8.
Ouranus Outanus.
Fig: 9.
Homo caudatus.
Fig: 7.

26 Monstrous peoples from *Specula physico-mathematico-historica* (1696).

volumes in a period of eight years, the *Relationes curiosae* contains 196 illustrations, both engravings and woodcuts, accompanied by descriptions tailored for middle-class readers' fascination with the lives and cultures of a world beyond their boundaries.[230] Happel's most popular work of non-fiction is, in effect, written evidence of the influence of news reports and their role in the construction of the early modern world for European audiences.[231]

26 **Johann Zahn (1641–1707).** ***Specula physico-mathematico-historica notabilium ac mirabilium sciendorum*****. Nuremberg: Johann Christoph Lochner, 1696.**

In 1696, the German cleric Johann Zahn published a comprehensive encyclopedia of natural knowledge founded on the hermetic and occult principles of the Jesuit scholar Athanasius Kircher (1602–1628).[232] His *Specula physico-mathematico-historica* is arranged into three parts. The first consists of the history of Creation followed by extensive writings on astrology as well as cosmography and cosmology; the second deals with geography, geology, mineralogy, botany, and zoology; and the third covers the diversity of humans and their inventions.[233] In the eighth chapter of the second volume, Zahn refers to the 'rarity' and 'spirit of wonder' in the displays arranged by the kingdoms of the sea.[234] He cites Pliny and Albertus Magnus (ca. 1193–1280) for descriptions of classical and medieval sea creatures like tritons and nymphs; he uses Olaus for reports on the famous monkfish and other monsters of the northern seas; and he compiles numerous works to document examples of early-modern encounters with sea monsters. This chapter lists forty-three entries in total, six of which illustrate a selection of sea monsters from the sources.

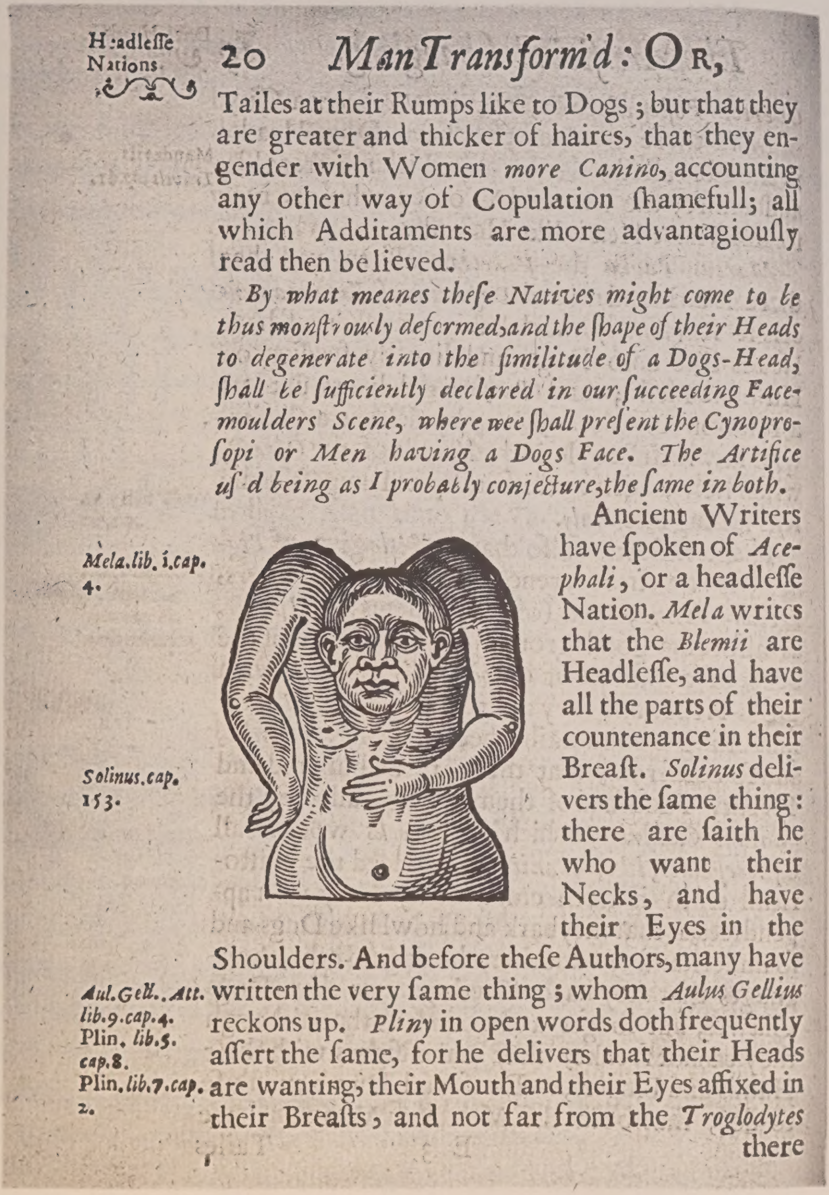
In the ninth chapter of the third volume, Zahn explores the 'forms of the human body' and relates 'wonderful exotic things' acquired from different regions.[235] He quotes the natural history of Peru by José de Acosta (1539–1600) as one of the thirty-nine accounts of giants and 'exotic humans of great magnitude' (including fossils) before relating the encounter between the explorer Juan Álvarez Maldonado (d. 1608) and two 'Andean pygmies' in Cuzco in 1561. This section continues with twenty-one chronicles of 'famous' monstrous peoples of the medieval tradition next to descriptions of men with tails, women with horns, and young boys with green-coloured skin. The illustration accompanying this section shows nine figures representing medieval and early modern ideas of monstrosities, all of which can be traced back to particular sources such as the collection of Ramusio's *Delle navigationi et viaggi* in addition to the accounts of the explorers Antonio Pigafetta (ca. 1491–1531), and Gregorio García (1556–1627), among others.

The approach to wonders in this encyclopedia corresponds to the methods applied by Francisci, Happel, and natural philosophers that situate wonders as the focus of their scientific inquiries.[236] Zahn's views in this regard are also similar to Gemma's *Ars cosmocritica* in that both authors rigorously explore astrological and cosmological theories without losing sight of other forms of knowledge in the act of evaluating the vast body of evidence provided by the natural world. As a result, this rich cabinet of scientific and historical wonders and curiosities surveys contemporary notions of natural philosophy and science while also examining wonders such as earthquakes, volcanoes, comets, celestial events as well as prodigies, monstrous peoples and animals as rational objects of contemplation.[237]

27 John Bulwer (1606–1656). *Anthropometamorphosis: Man transform'd, or, The Artificial Changeling.* London: W. Hunt, 1653.

The concept of monstrosity in John Bulwer's last book relies on the existence of 'foreign' and 'exotic' bodies. Bulwer was an English physician who wrote five books on non-verbal communication prior to turning his attention to this manual on reading the manners, customs, and fashions of 'foreigners' as signs of monstrosity.[238] The book is arranged into twenty-four chapters with the parts of the human body as the central focus for each 'scene,' as he labels them. Bulwer cross-examines the artificial transformations performed on the human body—tattooing, piercing, binding, and scarring— as acts of 'high-treason' against nature. From Pliny to Augustine, Theodor de Bry, Münster, Olaus Magnus, Gemma, and Lycosthenes, Bulwer's observations on the bodies of peoples of different nationalities are supported by a collection of 288 sources listed at the beginning of the book. After the first edition of 1650, *Anthropometamorphosis* saw four editions under several titles within a decade, including this enlarged and illustrated edition of 1653.[239]

The editors of the English periodical on antiquarianism, *The Retrospective Review, and Historical and Antiquarian Magazine*, draw a parallel between Bulwer's *Anthropometamorphosis* and 'modern discoveries in phrenology' in their review of the book published in 1828.[240] Such comparison is accurate as Bulwer interprets the anatomical features of the head as a way to advance his ideological views against artificial modifica-



Headleſſe Nations

20 *Man Transform'd*: Or,

Tailes at their Rumps like to Dogs; but that they are greater and thicker of haires, that they engender with Women *more Canino*, accounting any other way of Copulation ſhamefull; all which Additaments are more advantagiouſly read then believed.

By what meanes theſe Natives might come to be thus monſtrouſly deformed, and the ſhape of their Heads to degenerate into the ſimilitude of a Dogs-Head, ſhall be ſufficiently declared in our ſucceeding Face-moulders Scene, where wee ſhall preſent the Cynoproſopi or Men having a Dogs Face. The Artifice uſ'd being as I probably conjecture, the ſame in both.

Mela.lib.1.cap.4.

Solinus.cap.153.

Ancient Writers have ſpoken of *Acephali*, or a headleſſe Nation. *Mela* writes that the *Blemii* are Headleſſe, and have all the parts of their countenance in their Breaſt. *Solinus* delivers the ſame thing: there are ſaith he who want their Necks, and have their Eyes in the Shoulders. And before theſe Authors, many have written the very ſame thing; whom *Aulus Gellius* reckons up. *Pliny* in open words doth frequently aſſert the ſame, for he delivers that their Heads are wanting, their Mouth and their Eyes affixed in their Breaſts, and not far from the *Troglodytes* there

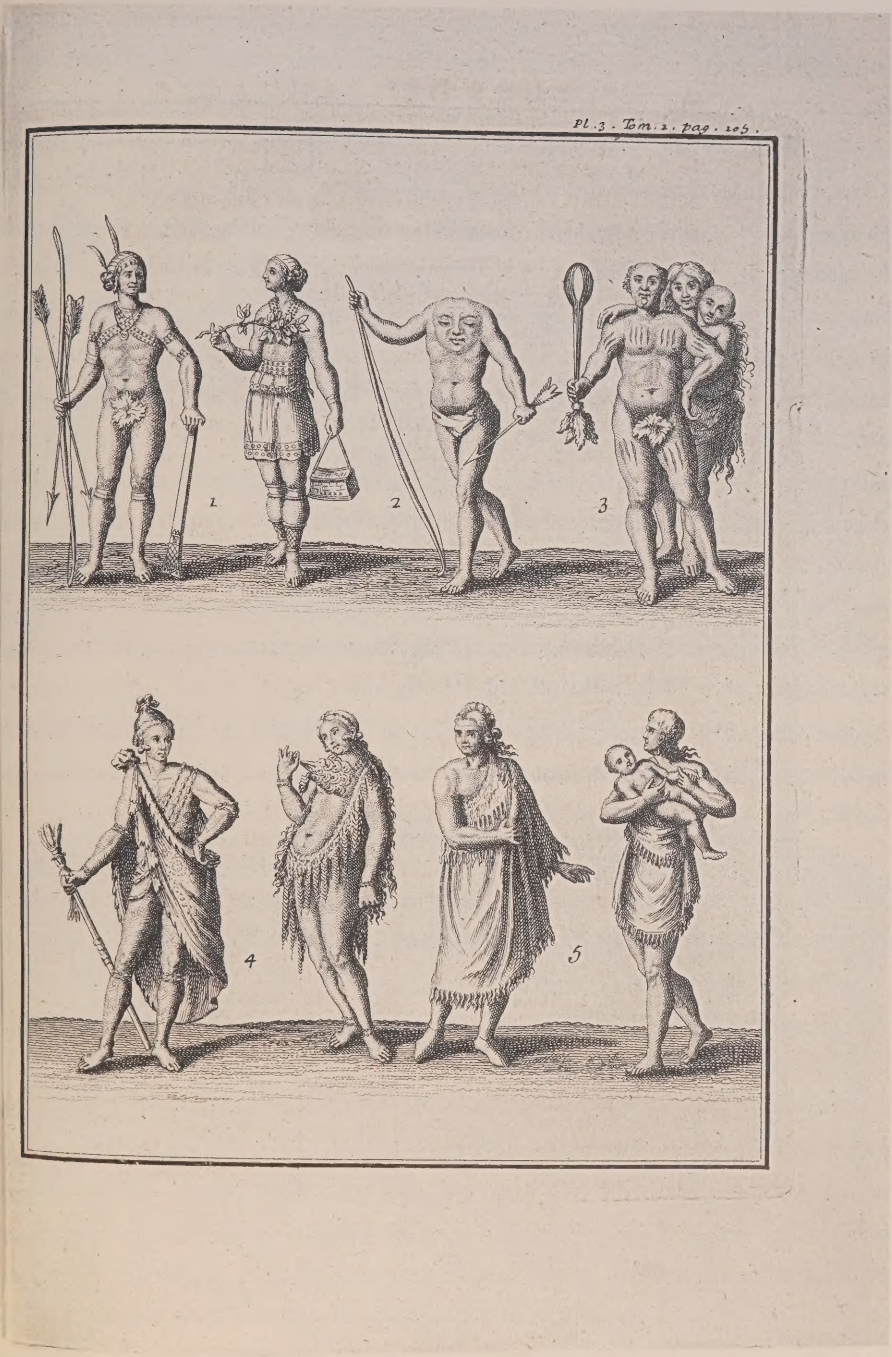
Aul.Gell..Att. lib.9.cap.4.
Plin. lib.5. cap.8.
Plin.lib.7.cap.2.

27 'Headless nations' from *Anthropometamorphosis* (1653).

tion of the human body. Among all the traditional monsters, Bulwer particularly focuses on the 'headless nation' in this chapter. 'But let us hear Sr. Walter Raleigh's relation of this kind of transformed nation,' Bulwer writes, 'which though it may be thought a mere fable, yet for my own part I am resolved it is true.' He begins the description of the acephali with his own reviews of the early writings of Pliny, Solinus, Augustine, and Mandeville, among other authors, then lists contemporary accounts of sighting and births of these peoples from 1525 to 1562, and explains the nature of this deformity within the scheme of artificial modification.

Besides illustrating another early-modern method to perceive and even analyze ethnicity through the lens of monstrosity, *Anthropometamorphosis* offers a historical view into collective concerns of Europeans in response to the racial encounters with peoples from every corner of the globe after the geographical 'discoveries' of the fifteenth century.[241] Bulwer's treatment of foreign bodies eventually inspired notions of monstrosity in scientific and medical approaches of the nineteenth century.[242] This fact is summed up in the pages of *The Retrospective Review* in which the editors portray Bulwer as a scholar who wrote in an 'age of great learning and little judgement, when fact and fiction were indiscriminately gorged and devoured by all who sought for the reputation of learning.'[243]

28 Joseph-François Lafitau (1681–1746). *Moeurs des sauvages amériquains, compares aux moeurs des premiers temps*. Paris: Charles Estienne Hochereau, 1724.
The coming into maturity of the discipline of anthropology was partially facilitated by a discourse of monstrosity published during the Age of Exploration and expressed in some of the works on the customs, manners, and fashions of the peoples of the world. When the Jesuit scholar and missionary Joseph-François Lafitau published his comprehensive two-volume treatise *Moeurs des sauvages amériquains, compares aux moeurs des premiers temps* in 1724, readers of the period held in their hands the first manifestation in the field of comparative anthropology.[244] Lafitau depends on analogies to describe his encounters with the rituals, customs, commodities, and different aspects of Iroquois societies and cultures as part of his mission in New France between 1711 and 1717. One of the key efforts of this treatise is to trace the origins of Native Americans to classical and medieval sources as a method of establishing a common historical ground upon which to illustrate their cultures for European readers.[245]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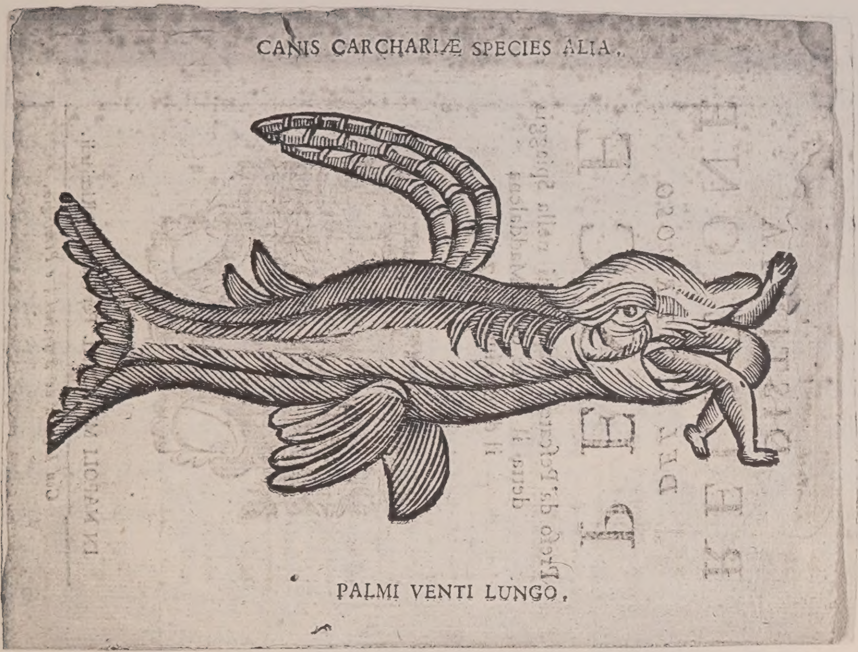
28 The acephali among Indigenous Peoples of the Americas from *Moeurs des sauvages amériquains, compares aux moeurs des premiers temps* (1724).

In the second chapter of the book, Lafitau questions the existence of 'various monstrous peoples' in the context of an overall discussion of the origins of Native Americans. He disputes the veracity of Pliny, Solinus, and other classical sources in the same way he rebuffs contemporary accounts of Walter Raleigh (ca. 1554–1618) and Jacques Cartier (1491–1557) on monstrous peoples in Guiana and Canada, respectively.[246] Lafitau then reconsiders, just for a moment, the presence of the acephali in North America when he recounts the 'rumours' of the capture of one of these headless creatures by Iroquois hunters in the fall of 1721.[247] For reasons that are embedded in his theory that the origins of all humans and their religions date back to the story of Genesis, the monster functions as a metaphor for encounters between the peoples of the East and the West.[248] 'Acepheles were formerly inhabitants of Africa near the Nile of the Red Sea,' Lafitau writes, 'today, according to these accounts, there should be at least two nations of them [...] on the Amazon River and in the centre of Guiana.'[249] Now located among the Iroquois of North America, Lafitau argues that the monster stands as evidence that 'confirms the idea that America and Asia are connected.'[250] In the engraving that accompanies this passage, an effort is made to exploit this idea by illustrating the acephali standing next to the Indigenous Peoples of the West Indies, Brazil, Florida, and Virginia. At the end of this story, Lafitau echoes the writings of Bulwer by warning readers that the ancient and modern headless peoples are not actual monsters but the result of 'artifice' or bodily modification, birth defects, or the product of the mother's imagination at the time of gestation.[251]

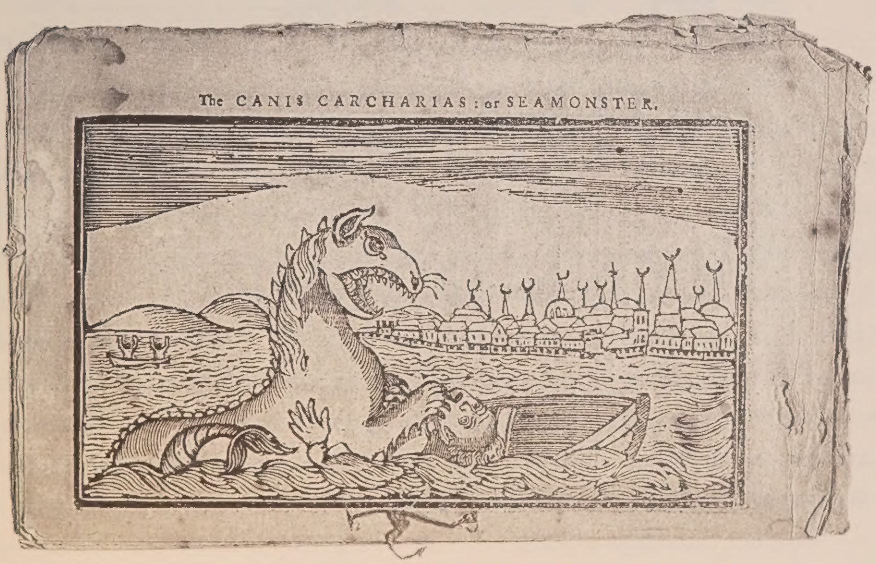
29 ***Distinta relazione del monstruoso pesce preso da' pescatori napolitani nella spiaggia detta il Ponte della Maddelena il di 6 giugno 1721.***
Naples: Francesco Ricciardi, 1721.

30 **Daniel George (1757–1804).** ***An Almanac for the Year of our Lord Christ 1784.***
Boston: Daniel George, 1784.

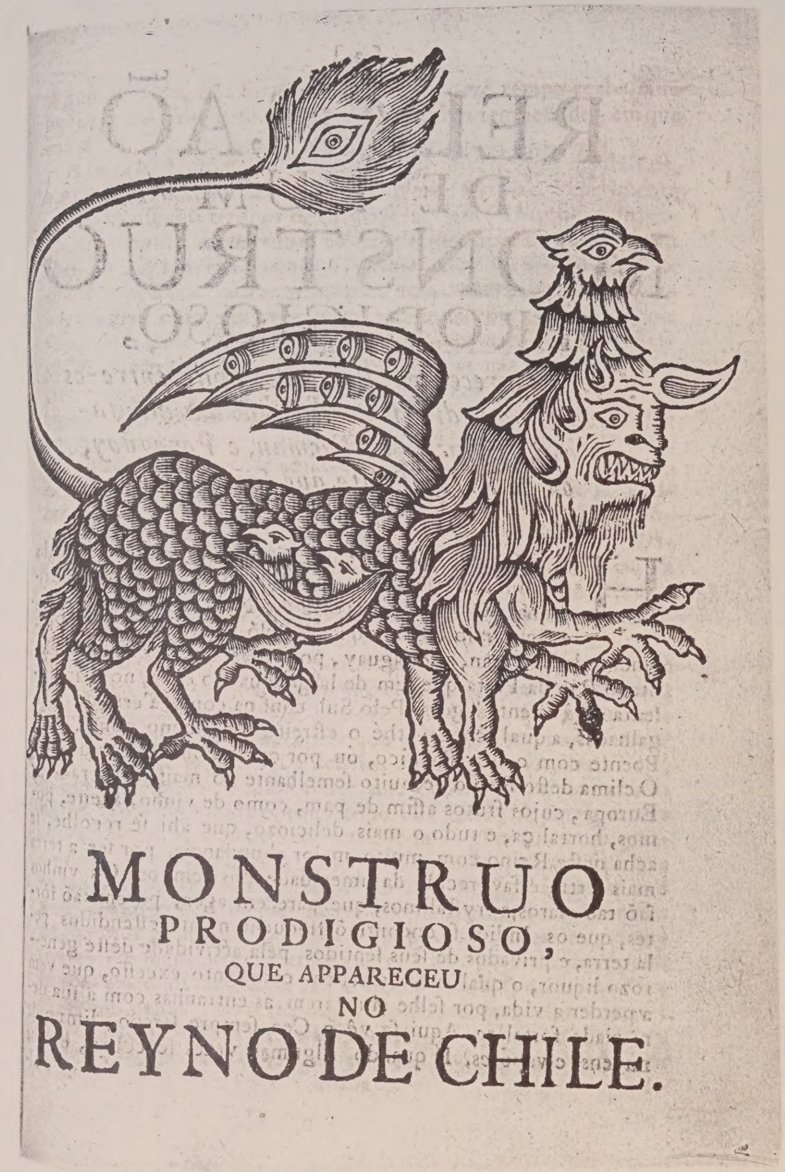
For European readers of the seventeenth and eighteenth centuries, a range of options were available to know more about the lives of peoples and the wonders of nature on the fringes of their world. Encyclopedias of natural history, anthologies of travel narratives, cosmographies, cartographic materials, and historical volumes were not the only messengers of wonders uncovered during the age of European colonial expansion. Rather, it was amateur writers who were mainly responsible for making these popular stories available to readers across every social status, religion, language, and region of the world. Such


CANIS CARCHARIÆ SPECIES ALIA.
PALMI VENTI LUNGO.

29 Shark from *Distinta relazione del monstruoso pesce* (1721).


The CANIS CARCHARIAS: or SEAMONSTER.

30 Shark from *An Almanac* (1784).



MONSTRUO
PRODIGIOSO,
QUE APPARECEU
NO
REYNO DE CHILE.

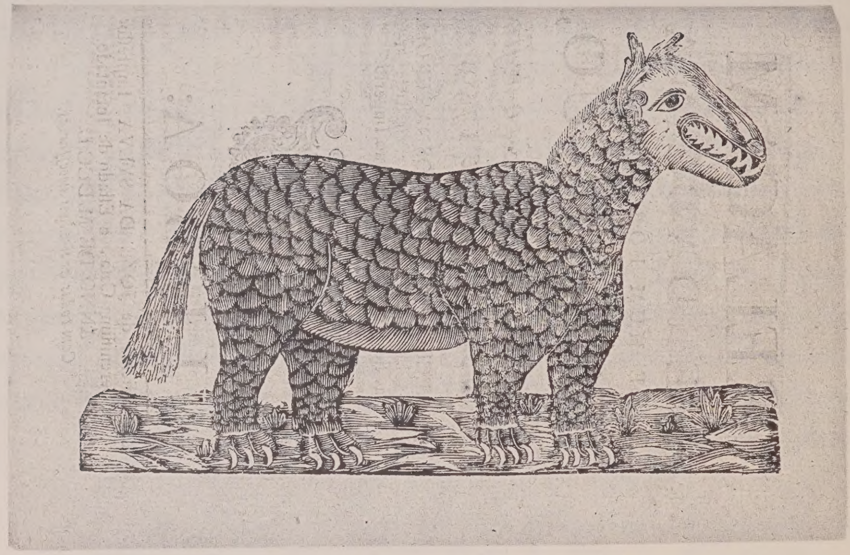
31 Monster from *Monstruo prodigioso* (1751).

writers effectively transcribed the oral stories of wonders and monsters for the pages of newspapers, broadsides, almanacs, journals, and other ephemera. Without these popular genres intended for the general public, the history of monsters in the West would simply be a catalogue of untold stories of monstrous encounters.

The *Canis charcharias* or shark is the protagonist of these two reports. On 6 June 1721, a group of fishermen captured and killed a female shark that had devoured a citizen of the town of Borgo a Mozzano, Italy. Once dissected, the insides of the 'monstrous fish' bore witness to the unfortunate event. In the year 1784, another story involving a 'sea monster' attacking a man was printed as part of an almanac published in Boston, Massachusetts. In both stories, the long tradition of representing sharks as vile, monstrous creatures is made even more evident as a result of crude woodcuts illustrating the attacks. In the end, sharks encapsulate all of the features common to sea monsters, provoking fear and awaking a sense of wonder in readers even to this day.

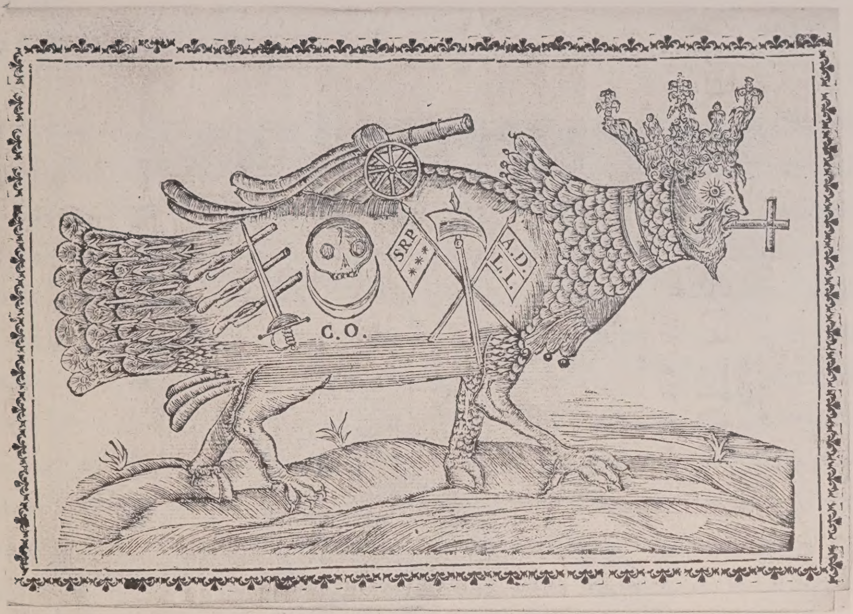
31 ***Monstruo prodigioso, que appareceu no Reino de Chile.***
Coimbra: No Real Colegio das Artes da Companhia de Jesus, 1751.
32 ***Relaçam verdadeira de hum formidavel monstruo, que no mez de janeiro de ste anno apareceo em hums matos da Turqia, e da fórma, com que foy morto, tirada de cartas fidedignas vindas do mesmo imperio.***
Lisbon: Joze da Sylva, 1750.
33 ***Bicho asiatico, monstruosa appariçam das montanhas da Persia, e juizo que se fez sobre a materia na Corte de Turquia.* Lisbon: Rita Cassiana, 1736.**

Between 1727 and 1751, at least eight anonymous stories of monsters were published as pamphlets of the kind frequently sold in bookstalls located in the streets of Portugal.[252] The accounts of monsters in these popular pamphlets are formulaic narratives devised to attract readers to entertaining yet religious and moralizing notions of the wonderful nature of remote and exotic lands.[253] Most often illustrated with woodcut vignettes on the upper covers, readers of the period were drawn to these images as part of the vibrant print culture known as *literatura de cordel* or 'string literature.'[254] Famous shipwreck narratives deeply associated with the Portuguese colonial expansion populated this particular reading market with explorers' and sailors' encounters with the ruthless nature of the sea. In the same spirit, stories of prodigious monsters and natural wonders were regularly featured in *cordel* pamphlets published in the first half of the eighteenth century.[255]

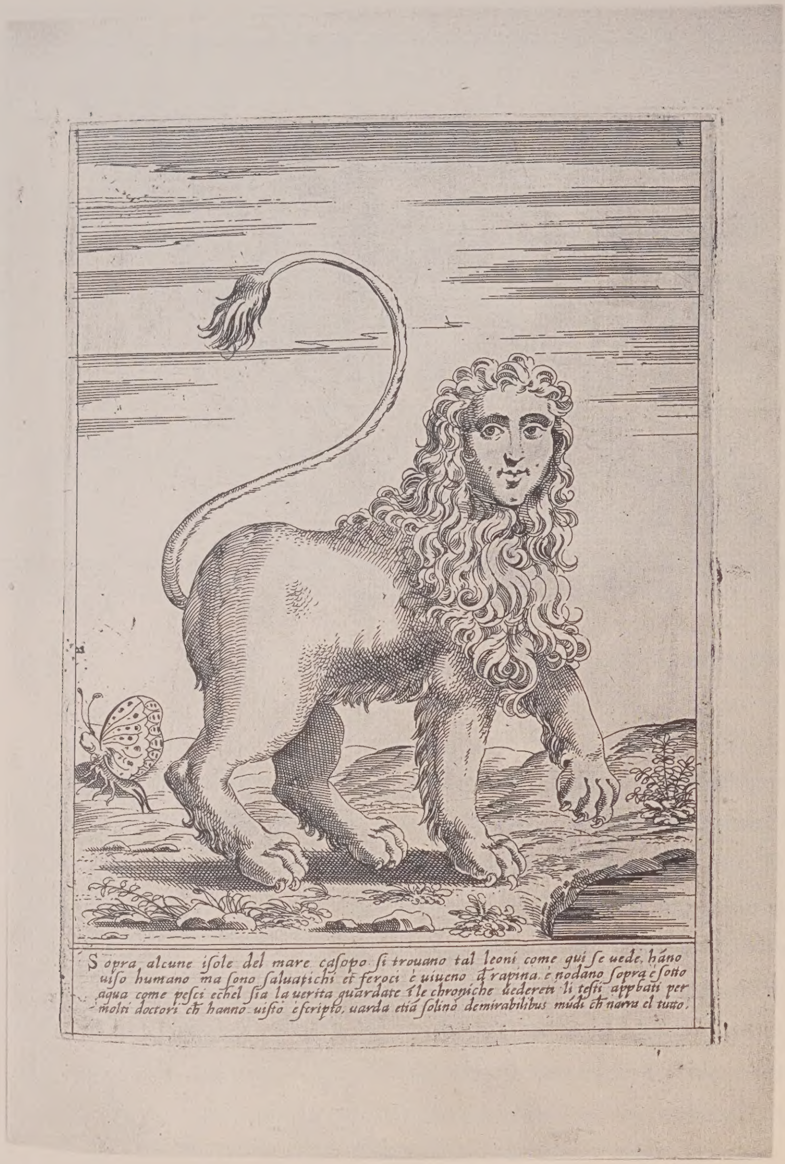


32 Equine-monster from *Relaçam verdadeira* (1750).

The three stories retold in these pamphlets transport readers to inhospitable regions in the interior of Chile, Turkey, and Persia. In each account, 'armies' of men eventually decimate the monsters after fearful battles resulting in considerable human casualty. The two-headed creature reported in Chile is a horrible sight that simultaneously aroused terror and admiration; the dead body of the equine-monster in Turkey is exhibited in the town square so that all might witness its strength and magnitude; and the beast found in Persia is killed in a cave and then presented by the narrator as a symbol of church-state relations. In these *cordel* pamphlets, the prose of travel narratives merges with the tradition of books of wonders as observations on the geography, flora, and fauna of the regions set the stage for interpretations of the nature of the monsters in each story.[256] After the second half of the eighteenth century, the *Real Mesa Censória* denied the publication of such stories which they claimed took advantage of the credulity of readers.[257] Today, these accounts survive as examples in print of the long-lasting impressions of monsters and wonders left by real and imaginary encounters between Europeans and the rest of the world.



33 Prodigy from *Bicho asiatico* (1736).

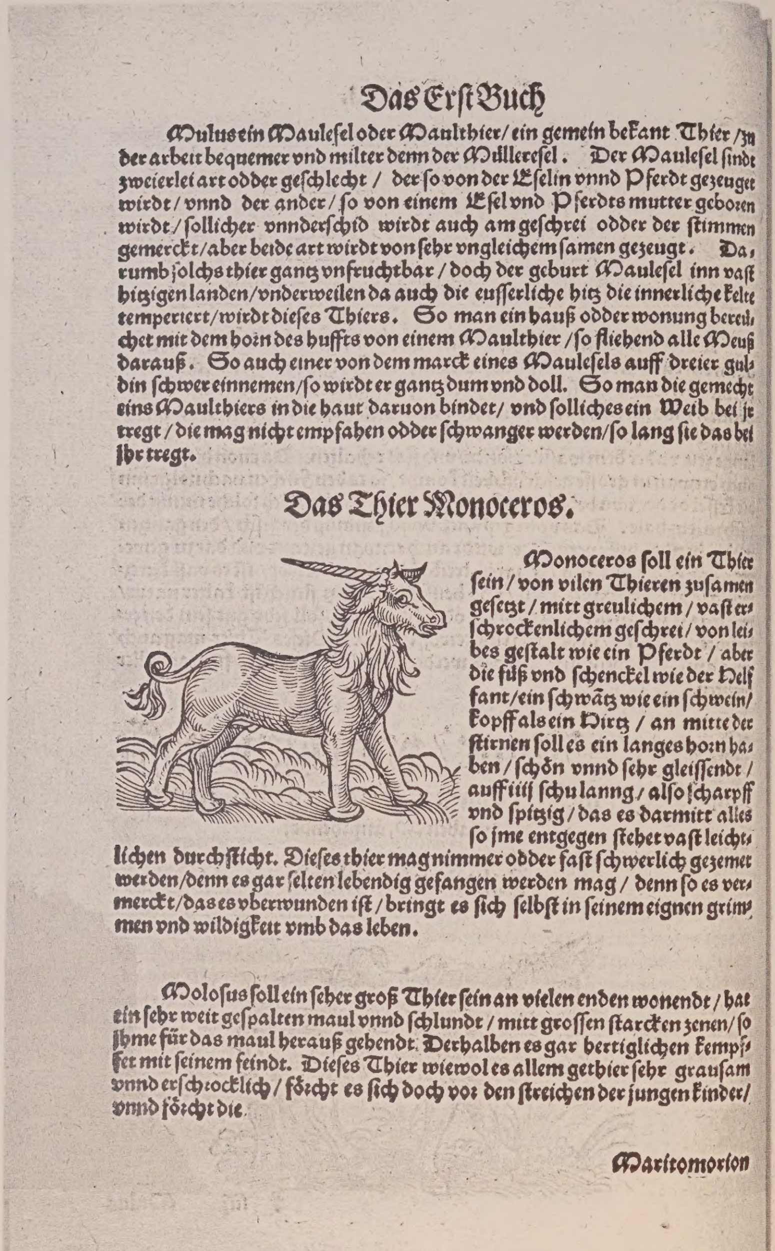


Sopra alcune iſole del mare caſopo ſi trouano tal leoni come qui ſe uede, háno
uiſo humano ma ſono ſaluatichi et feroci é uiueno d̄ rapina. é nodano ſopra é ſotto
aqua come peſci echel ſia la uerita guardate ī le chroniche uedereti li teſti appbati per
molti doctori ch̄ hanno uiſto é ſcripto, uarda etiá ſolino demirabilibus múdi ch̄ narra el tutto.

'Manticore' from *Opera nelaquale vie molti mostri de tutte le parti del mondo antichi et moderni* (1585).

Part III:
On Monstrous Nature

The wonders of the natural world have always captivated the human imagination. The annals of Renaissance natural history abound with references to monstrous animals, mythical creatures, strange phenomena, and every kind of natural curiosity. Zoological encyclopedias, compendia of natural philosophy, and travel narratives hold many stories of monstrosity which expose our obsession with explaining the secrets of nature. Mythical creatures like the unicorn and phoenix, for example, stand as timeless figures that capture our desire to decipher nature's healing powers and ability to achieve eternal life. Newly 'discovered' species of New World animals, like the opossum and the manatee, were associated with hybrid creatures found in earlier European sources. As Europeans travelled the world during the Age of Exploration, reports about and specimens of exotic and curious natural objects were sent back to join renowned cabinets of curiosities, as well as museums, and libraries of natural history across Europe. The rise of modern 'scientific' writing during the Renaissance, however, essentially reproduced the ancient and medieval lore of wonders and marvels of nature—confined to the leaves of medieval manuscript tradition—in the new printed formats available to wider audiences. As a result, monsters 'existed' as part of the historical narrative concerning natural wonders and the development of new ideas and methods to interpret the natural world.



Das Erſt Buch

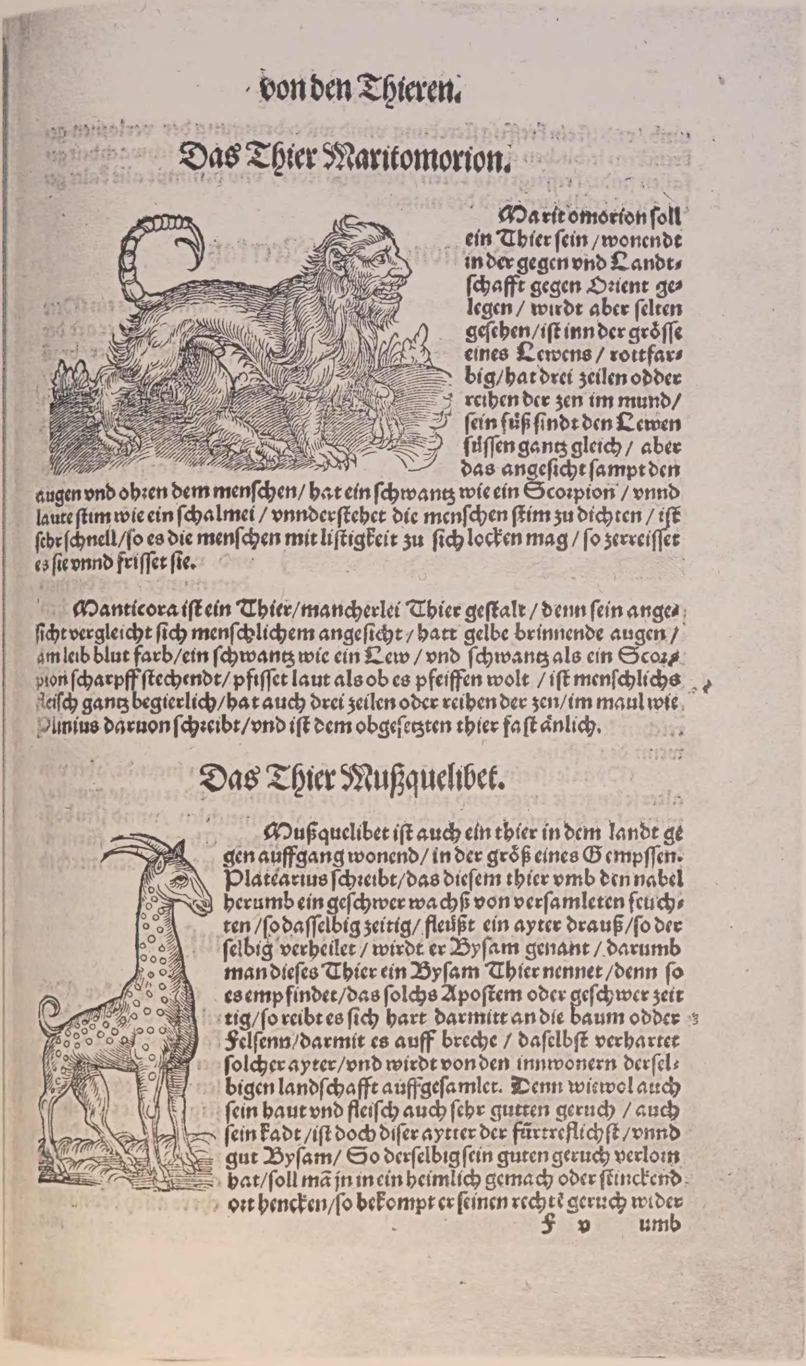
Mulus ein Mauleſel oder Maulthier / ein gemein bekant Thier / zu der arbeit bequemer vnd milter denn der Müllereſel. Der Mauleſel ſindt zweierlei art odder geſchlecht / der ſo von der Eſelin vnnd Pferdt gezeuget wirdt / vnnd der ander / ſo von einem Eſel vnd Pferdts mutter geboren wirdt / ſollicher vnnderſchid wirdt auch am geſchrei odder der ſtimmen gemerckt / aber beide art wirdt von ſehr vngleichem ſamen gezeugt. Darumb ſolchs thier gantz vnfruchtbar / doch der geburt Mauleſel inn vaſt hitzigen landen / vnderweilen da auch die euſſerliche hitz die innerliche kelte temperiert / wirdt dieſes Thiers. So man ein hauß odder wonung bereuchet mit dem horn des huffts von einem Maulthier / ſo fliehend alle Meuß darauß. So auch einer von dem marck eines Mauleſels auff dreier guldin ſchwer einnemen / ſo wirdt er gantz dum vnd doll. So man die gemecht eins Maulthiers in die haut daruon bindet / vnd ſolliches ein Weib bei jr tregt / die mag nicht empfahen odder ſchwanger werden / ſo lang ſie das bei jhr tregt.

Das Thier Monoceros.

Monoceros ſoll ein Thier ſein / von vilen Thieren zuſamen geſetzt / mitt greulichem / vaſt erſchrockenlichem geſchrei / von leibes geſtalt wie ein Pferdt / aber die füß vnd ſchenckel wie der Helffant / ein ſchwätz wie ein ſchwein / kopff als ein Hirtz / an mitte der ſtirnen ſoll es ein langes horn haben / ſchön vnnd ſehr gleiſſendt / auff iiij ſchu lanng / alſo ſcharpff vnd ſpitzig / das es darmitt alles ſo jme entgegen ſtehet vaſt leichtlichen durchſticht. Dieſes thier mag nimmer odder faſt ſchwerlich gezemet werden / denn es gar ſelten lebendig gefangen werden mag / denn ſo es vermerckt / das es vberwunden iſt / bringt es ſich ſelbſt in ſeinem eignen grimmen vnd wildigkeit vmb das leben.

Moloſus ſoll ein ſeher groß Thier ſein an vielen enden wonendt / hat ein ſehr weit geſpalten maul vnnd ſchlundt / mitt groſſen ſtarcken zenen / ſo jhme für das maul herauß gehendt. Derhalben es gar bertiglichen kempffet mit ſeinem feindt. Dieſes Thier wiewol es allem gethier ſehr grauſam vnnd erſchrocklich / förcht es ſich doch vor den ſtreichen der jungen kinder / vnnd förcht die.

Maritomorion



von den Thieren.

Das Thier Maritomorion.

Maritomorion ſoll ein Thier ſein / wonende in der gegen vnd Landtſchafft gegen Orient gelegen / wirdt aber ſelten geſehen / iſt inn der gröſſe eines Lewens / rottfarbig / hat drei zeilen odder reihen der zen im mund / ſein füß ſindt den Lewen füſſen gantz gleich / aber das angeſicht ſampt den augen vnd ohren dem menſchen / hat ein ſchwantz wie ein Scorpion / vnnd laute ſtim wie ein ſchalmei / vnnderſtehet die menſchen ſtim zu dichten / iſt ſehr ſchnell / ſo es die menſchen mit liſtigkeit zu ſich locken mag / ſo zerreiſſet es ſie vnnd friſſet ſie.

Manticora iſt ein Thier / mancherlei Thier geſtalt / denn ſein angeſicht vergleicht ſich menſchlichem angeſicht / hatt gelbe brinnende augen / am leib blut farb / ein ſchwantz wie ein Lew / vnd ſchwantz als ein Scorpion ſcharpff ſtechendt / pfiſſet laut als ob es pfeiffen wolt / iſt menſchlichs fleiſch gantz begierlich / hat auch drei zeilen oder reihen der zen / im maul wie Plinius daruon ſchreibt / vnd iſt dem obgeſetzten thier faſt änlich.

Das Thier Mußquelibet.

Mußquelibet iſt auch ein thier in dem landt gegen auffgang wonend / in der größ eines Gempſſen. Platearius ſchreibt / das dieſem thier vmb den nabel herumb ein geſchwer wachß von verſamleten feuchten / ſo daſſelbig zeitig / fleußt ein ayter drauß / ſo derſelbig verheilet / wirdt er Byſam genant / darumb man dieſes Thier ein Byſam Thier nennet / denn ſo es empfindet / das ſolchs Apoſtem oder geſchwer zeittig / ſo reibt es ſich hart darmitt an die baum odder Felſenn / darmit es auff breche / daſelbſt verhartet ſolcher ayter / vnd wirdt von den innwonern derſelbigen landſchafft auffgeſamlet. Denn wiewol auch ſein haut vnd fleiſch auch ſehr gutten geruch / auch ſein kadt / iſt doch diſer aytter der fürtreflichſt / vnnd gut Byſam / So derſelbig ſein guten geruch verlorn hat / ſoll mā jn in ein heimlich gemach oder ſtinckend ort hencken / ſo bekompt er ſeinen rechtē geruch wider

F v umb

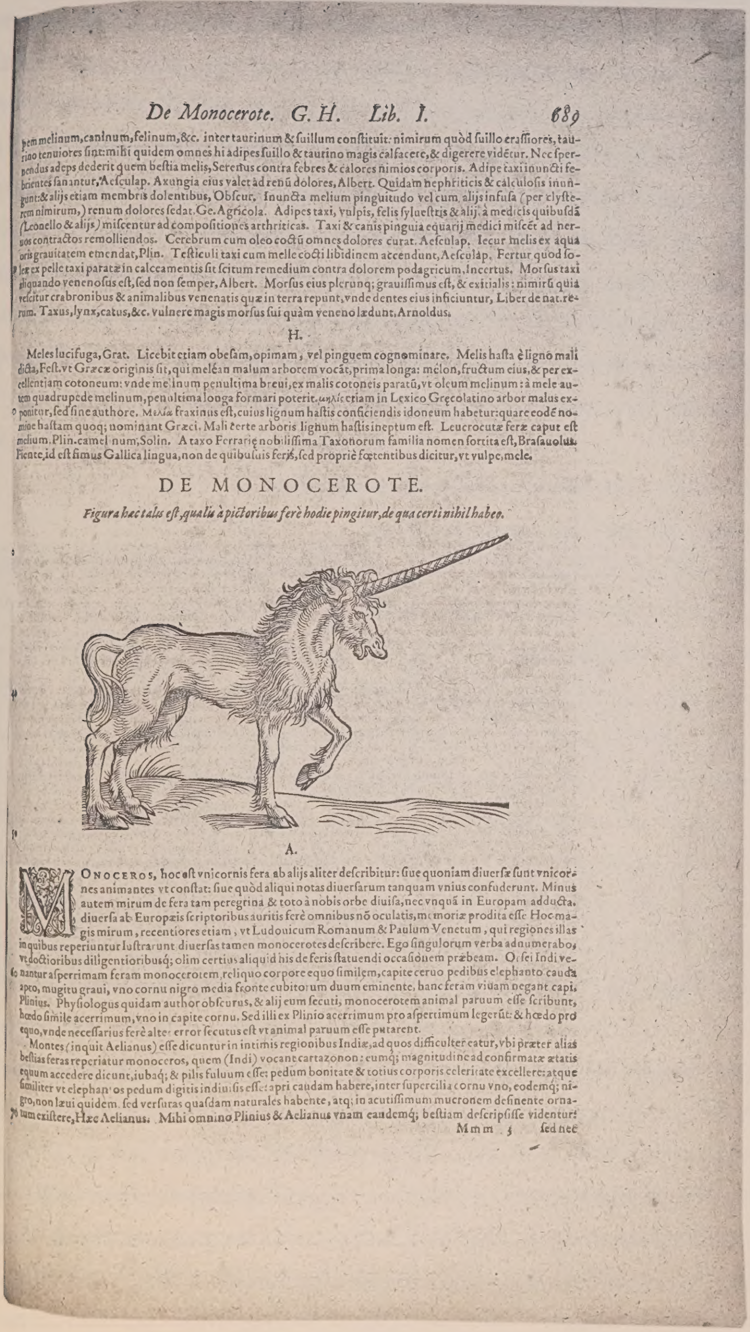
34 Monoceros, manticore, and giraffe from *Thierbuch Alberti Magni* (1545).

34 Albertus Magnus (ca. 1193–1280). *Thierbuch Alberti Magni.* Frankfort: Cyriaco Jacobi zum Bart, 1545.

Well before he was canonized in 1931, and even named 'patron of those who cultivate the sciences of nature' in 1941, Albertus Magnus was firmly established in the canon of the natural sciences.[258] The English natural philosopher Roger Bacon (ca. 1219–1292) called him 'the most noted of Christian scholars' of his time and later Renaissance naturalists appraised his zoological works as indispensable sources for their own descriptions of animals.[259] Known as *Doctor universalis* at the peak of his career, Albertus took advantage of his positions as Master of Theology, provincial of the Dominican Order, and Bishop of Regensburg to further his philosophical interests by visiting libraries and cultivating relations with other scholars of his generation.[260] Albertus not only had the tremendous privilege of working alongside Roger Bacon as well as with students of the calibre of Thomas Aquinas (1225–1274) and Thomas of Cantimbré (1201–1272) but his career trajectory was also guided by having access to the recently translated texts of Aristotle.[261] Amongst a vast corpus of 470 titles attributed to his name,[262] Albertus's major contribution to the natural sciences was to recover Aristotle's zoological works and make them available as compendia and commentaries for medieval readers, together with his original observations of the natural world.[263]

Albertus's *De animalibus*, composed between 1256 and 1260 and extant in over forty manuscript copies, is one of his seventy works on philosophy, science, and theology.[264] In the first nineteen books of this compendium about animals, Albertus introduces to medieval scholarship one of the first and most influential commentaries of Aristotle's zoological writings after centuries of obscurity.[265] For the next two books (20–21), he discusses his original observations on animals, followed by the last five books (22–26) consisting of a bestiary mainly based on Thomas of Cantimbré's *De natura rerum*.[266] Albertus catalogues 476 entries of animals, most of which derive from Cantimbré with additional references to Pliny, Solinus, Isidore of Seville, and other sources.[267]

Like lapidaries and herbals, bestiaries provide readers with quick points of reference organized as alphabetical entries with concise descriptions of the name, features, and behaviour of the natural subjects, and occasionally entwined with moral and religious meanings.[268] 'The *basiliscus* is a serpent called *regulus* in Latin translation,' reads one entry, 'for the word means the same as the Greek *basiliscus*.'[269] The rest of the entry for the basilisk captures the folklore of this powerful creature able to kill with its hiss and glare,



De Monocerote. G.H. Lib. I. 689

pem melinum, caninum, felinum, &c. inter taurinum & ſuillum conſtituit: nimirum quòd ſuillo craſſiores, taurino tenuiores ſint: mihi quidem omnes hi adipes ſuillo & taurino magis calfacere, & digerere videtur. Nec ſpernendus adeps dederit quem beſtia melis, Serenus contra febres & calores nimios corporis. Adipe taxi inuncti febrientes ſanantur, Aeſculap. Axungia eius valet ad renũ dolores, Albert. Quidam nephriticis & calculoſis inungunt: & alijs etiam membris dolentibus, Obſcur. Inuncta melium pinguitudo vel cum alijs infuſa (per clyſterem nimirum,) renum dolores ſedat, Ge. Agricola. Adipes taxi, vulpis, felis ſylueſtris & alij, à medicis quibuſdã (Leonello & alijs) miſcentur ad compoſitiones arthriticas. Taxi & canis pinguia equarij medici miſcẽt ad neruos contractos remolliendos. Cerebrum cum oleo coctũ omnes dolores curat, Aeſculap. Iecur melis ex aqua oris grauitatem emendat, Plin. Teſticuli taxi cum melle cocti libidinem accendunt, Aeſculap. Fertur quod ſoleæ ex pelle taxi paratæ in calceamentis ſit ſcitum remedium contra dolorem podagricum, Incertus. Morſus taxi aliquando venenoſus eſt, ſed non ſemper, Albert. Morſus eius plerunq; grauiſſimus eſt, & exitialis: nimirũ quia reficitur crabronibus & animalibus venenatis quæ in terra repunt, vnde dentes eius inficiuntur, Liber de nat. rerum. Taxus, lynx, catus, &c. vulnere magis morſus ſui quàm veneno lædunt, Arnoldus.

H.

Meles lucifuga, Grat. Licebit etiam obeſam, opimam, vel pinguem cognominare. Melis haſta è ligno mali dicta, Feſt. vt Græcæ originis ſit, qui melêan malum arborem vocãt, prima longa: mêlon, fructum eius, & per excellentiam cotoneum: vnde melinum penultima breui, ex malis cotoneis paratũ, vt oleum melinum: à mele autem quadrupede melinum, penultima longa formari poterit. μηλὶς etiam in Lexico Grꝗcolatino arbor malus exponitur, ſed ſine authore. Μελία fraxinus eſt, cuius lignum haſtis conficiendis idoneum habetur: quare eodẽ nomine haſtam quoq; nominant Græci. Mali certe arboris lignum haſtis ineptum eſt. Leucrocutæ feræ caput eſt melium, Plin. camelinum, Solin. A taxo Ferrarię nobiliſſima Taxonorum familia nomen ſortita eſt, Braſauolus. Fiente, id eſt fimus Gallica lingua, non de quibuſuis feris, ſed propriè fœtentibus dicitur, vt vulpe, mele.

DE MONOCEROTE.

Figura hæc talis eſt, qualis à pictoribus ferè hodie pingitur, de qua certi nihil habeo.

A.

MONOCEROS, hoc eſt vnicornis fera ab alijs aliter deſcribitur: ſiue quoniam diuerſæ ſunt vnicornes animantes vt conſtat: ſiue quòd aliqui notas diuerſarum tanquam vnius confuderunt. Minus autem mirum de fera tam peregrina & toto à nobis orbe diuiſa, nec vnquã in Europam adducta, diuerſa ab Europæis ſcriptoribus auritis ferè omnibus nõ oculatis, memoriæ prodita eſſe. Hoc magis mirum, recentiores etiam, vt Ludouicum Romanum & Paulum Venetum, qui regiones illas in quibus reperiuntur luſtrarunt, diuerſas tamen monocerotes deſcribere. Ego ſingulorum verba adnumerabo, vt doctioribus diligentioribusq; olim certius aliquid his de feris ſtatuendi occaſionem præbeam. Orſei Indi venantur aſperrimam feram monocerotem, reliquo corpore equo ſimilem, capite ceruo pedibus elephanto cauda apro, mugitu graui, vno cornu nigro media fronte cubitorum duum eminente, hanc feram viuam negant capi, Plinius. Phyſiologus quidam author obſcurus, & alij eum ſecuti, monocerotem animal paruum eſſe ſcribunt, hœdo ſimile acerrimum, vno in capite cornu. Sed illi ex Plinio acerrimum pro aſperrimum legerũt: & hœdo pro equo, vnde neceſſarius ferè alter error ſecutus eſt vt animal paruum eſſe putarent.

Montes (inquit Aelianus) eſſe dicuntur in intimis regionibus Indiæ, ad quos difficulter eatur, vbi præter alias beſtias feras reperiatur monoceros, quem (Indi) vocant cartazonon: cumq; magnitudine ad confirmatæ ætatis equum accedere dicunt, iubaq; & pilis fuluum eſſe: pedum bonitate & totius corporis celeritate excellere: atque ſimiliter vt elephantos pedum digitis indiuiſis eſſe: apri caudam habere, inter ſupercilia cornu vno, eodemq; nigro, non læui quidem, ſed verſuras quaſdam naturales habente, atq; in acutiſſimum mucronem deſinente ornatum exiſtere, Hæc Aelianus. Mihi omnino Plinius & Aelianus vnam eandemq; beſtiam deſcripſiſſe videntur:

Mmm 5 ſed nec

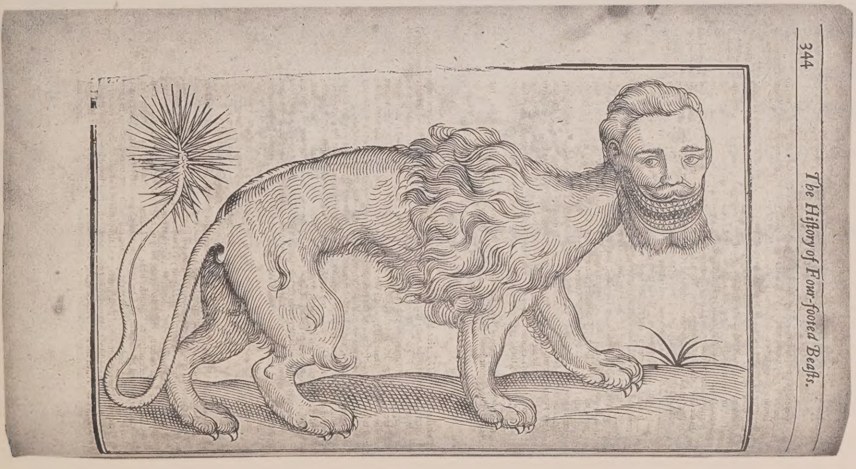
35 Unicorn from *Historiae animalium* (1585).

and include interjections by Albertus who explains the plausible causes for its behaviour and existence. Although Albertus was methodical in explaining the role of monstrosity in the natural world, he reports several composite creatures with a certain level of credulity.[270] One example is the manticore, a human-eating animal which he describes as having 'the face of a human, gray eyes, the body of a lion blood-red in color, the tail of a scorpion that is spiked with a strong stinger, and a voice that is so sibilant that it imitates the sound of pipes and trumpets.'[271] In this German translation of 1545 of the last five books of *De animalibus*, some of its 218 woodcut illustrations depict a number of 'hybrid' creatures of the land and sea. All kinds of real and imaginary animals are scattered across the pages of what would become the first comprehensive treatise of natural philosophy to embrace Aristotelean principles of zoology for the Middle Ages.[272]

35 Conrad Gessner (1516–1565). *Historiae animalium.*
Frankfurt: Robert Campier, 1602–1604.

Natural history publications furnished almost one fifth of the private library of Conrad Gessner, a Swiss physician and scholar whose monumental encyclopedia, *Historia animalium*, was published between 1551–1558 and 1587.[273] In his studio, Gessner collected drawings of animals, derived information from his correspondence with other scholars, and transcribed passages from ancient and contemporary treatises on natural subjects into his commonplace books.[274] All of these efforts brought him closer to his goal of compiling into one collection every available source ever written on the natural history of animals.[275] *Historia animalium* is the most comprehensive and ground-breaking zoological study of its kind, one that continues the legacy of Aristotle and his medieval promoter Albertus Magnus into the sixteenth century.[276]

Historia animalium is arranged into five volumes (the last one published posthumously in 1587) with the division of the animal kingdom into five main groups (quadrupeds, amphibians, birds, fish, and reptiles), each one organized in alphabetical order with the nomenclature of all the species supplied in Latin, Hebrew and several vernacular languages known to Gessner. The encyclopedia comprises over 4,500 pages of descriptions with more than twelve hundred woodcut illustrations, some of which were commissioned for this work.[277] Obtained from modern travel accounts, and natural histories, Gessner's visual and textual descriptions of animals from the New World—like the opossum, armadillo, sloth, and llama—appear beside legendary monsters of classical and medieval texts.[278] Regarding the dragon, for example, Gessner compiles information from popular and natural history sources for his novel interpretations of this mythical creature that would become the model for later treatments by Aldrovandi and Kircher.[279] The sea monsters of Olaus's *Historia de gentibus septentrionalibus* also make their way into this encyclopedia which accurately describes real fish as well. In contrast with his predecessors, Gessner uses rational arguments to explain the exotic and strange creatures found in earlier sources.[280] In the case of the manticore, Gessner analyzes various references on the composite nature of the creature and even compares its multiple names to assert, in the end, that the manticore is a close relative of the hyena.[281] For Gessner and other natural philosophers of the period, the monsters of classical and medieval sources remain present in their works simply as reminders of a long tradition but not as evidence of their belief in the existence of monstrous animals.[282]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The History of Four-footed Beasts.

36 **Edward Topsell (1572–1625?). *The History of Four-Footed Beasts and Serpents.* London: Printed by E. Cotes, for G. Sawbridge, 1658.**

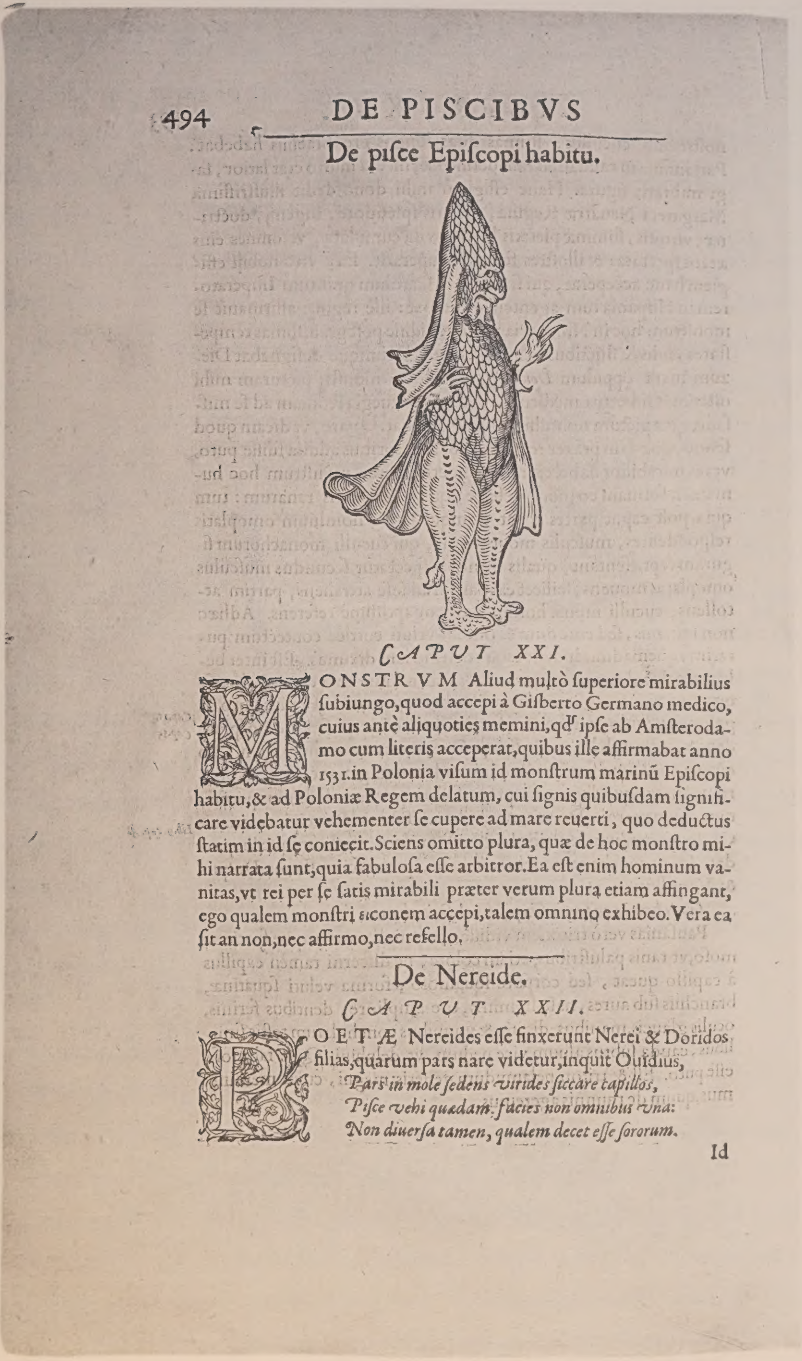
In *The History of Four-Footed Beasts and Serpents*, the cleric Edward Topsell offered readers of the English language the first substantial book on animals to be published in Great Britain.[283] His translation from the Latin of the first volume of Gessner's pioneering encyclopedia of zoology was first published in 1607 and enlarged in 1658 to include new editions of *The History of Serpents* (1608) and *The Theatre of Insects* (1634). While the zoological works of Gessner and Aldrovandi circulated in the rest of Europe, English readers had access to Topsell's books which were organized in the convention of bestiaries and illustrated with hundreds of woodcuts based on Gessner's and other sources.[284] Unlike Gessner and Aldrovandi, Topsell was not a naturalist for his aim was not to create new zoological knowledge based on first-hand observation. Instead, by using existing sources, he derived moral lessons from their descriptions of the habits, physical qualities and habitats of the animals, as well as their medicinal and nutritional properties.

The traditional animal lore found in earlier sources is an intrinsic part of this book. Topsell replicates the monstrous and mythical beasts of the past while also adding identifiable traits from the behaviour of real and imaginary animals. 'There is no creature among all the beasts in the world,' Topsell writes, 'which is so ample demonstration of the power and wisdom of Almighty God as the elephant.' The fox, for instance, is a 'deceitful' creature, the hyena or manticore is known to be a 'voice-counterfeiter,' and the mythical lamia is described as a 'monster compounded of a beast and a fish' that lures men with her beauty into deadly traps. Even though at times Topsell attempts to warn readers of the veracity of his sources, in his own arguments he reproduces and even augments the tradition of monstrous and mythical creatures of the past.

37 Guillaume Rondelet (1507–1566). *Libri de piscibus marinis*. Lyon: Matthiam Bonhomme, 1554.

38 Pierre Belon (1517?–1564). *La nature & diversité des poissons*. Paris: Charles Estienne, 1555.

Ichthyology emerged as a single discipline within the field of zoology in the works of the French naturalists Pierre Belon and Guillaume Rondelet.[285] Initially published in the 1550s, their investigations set subsequent works on fish on the path towards scientific classification prior to the rise of the Linnaean taxonomy in 1750.[286] Belon, who also wrote a popular book of travels filled with scientific observations (1553), published his *Histoire naturelle des estranges poissons* in 1551 as a small quarto volume considered today as the first printed book solely devoted to fish, a category which included, at the time, water-dwelling animals like dolphins and hippopotamuses.[287] Similarly, Rondelet toured the Mediterranean Sea in order to observe and describe native fish as the basis for the publication of his *Libri de piscibus marinus* (1554) and *Universae aquatilium historiae* (1555),



494 DE PISCIBVS

De piſce Epiſcopi habitu.

CAPUT XXI.

MONSTRVM Aliud multò ſuperiore mirabilius ſubiungo, quod accepi à Giſberto Germano medico, cuius antè aliquoties memini, qđ ipſe ab Amſterodamo cum literis acceperat, quibus ille affirmabat anno 1531. in Polonia viſum id monſtrum marinũ Epiſcopi habitu, & ad Poloniæ Regem delatum, cui ſignis quibuſdam ſignificare videbatur vehementer ſe cupere ad mare reuerti, quo deductus ſtatim in id ſe coniecit. Sciens omitto plura, quæ de hoc monſtro mihi narrata ſunt, quia fabuloſa eſſe arbitror. Ea eſt enim hominum vanitas, vt rei per ſe ſatis mirabili præter verum plura etiam affingant, ego qualem monſtri eiconem accepi, talem omnino exhibeo. Vera ea ſit an non, nec affirmo, nec refello.

De Nereide.

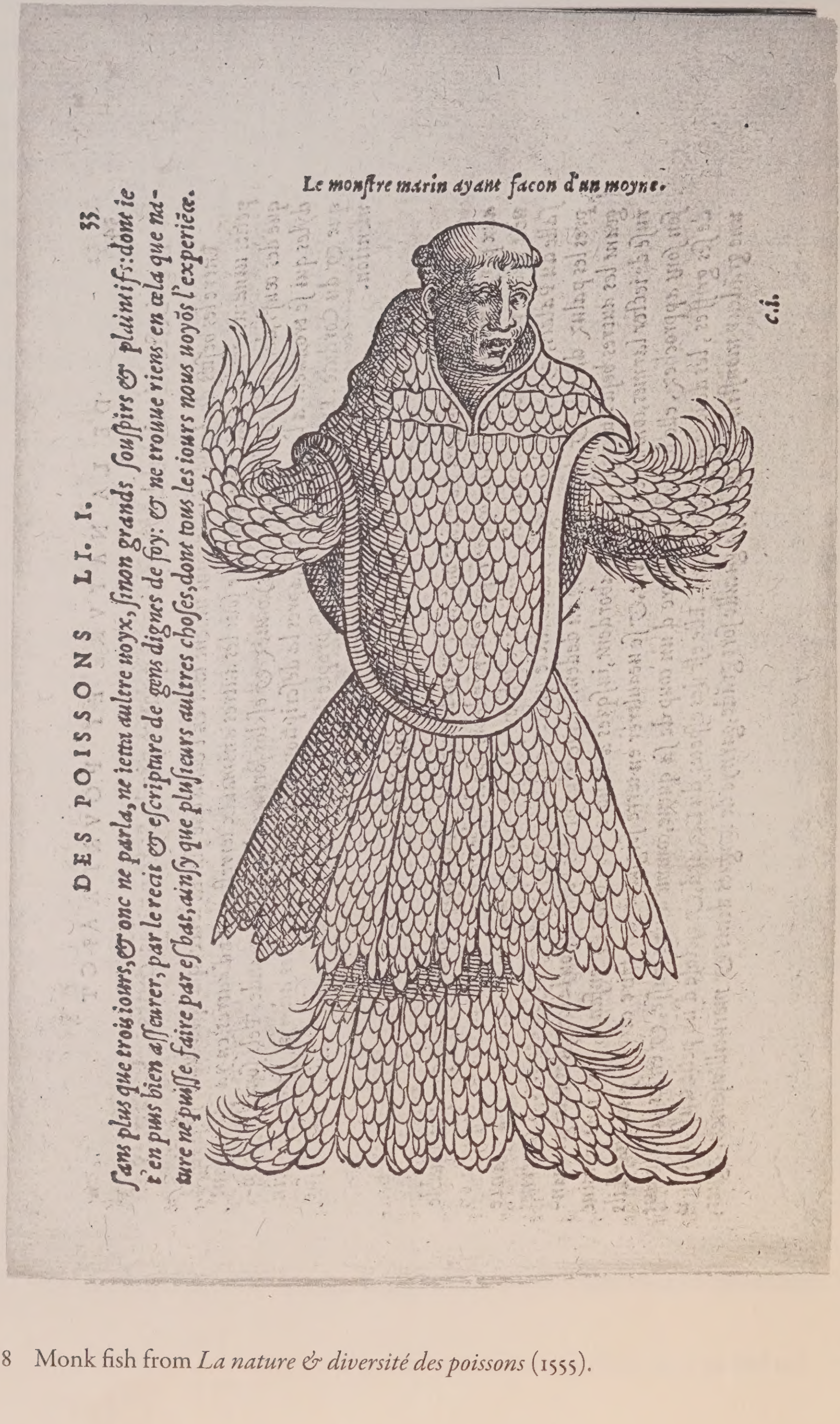
CAPUT XXII.

POETÆ Nereides eſſe finxerunt Nerei & Doridos filias, quarum pars nare videtur, inquit Ouidius,

Pars in mole ſedens virides ſiccare capillos,
Piſce vehi quadam: facies non omnibus vna:
Non diuerſa tamen, qualem decet eſſe ſororum.

Id

37 Sea bishop from *Libri de piscibus marinis* (1554)



DES POISSONS LI. I. 33

ſans plus que trois iours, & onc ne parla, ne ietta aultre uoyx, ſinon grands ſouſpirs & plaintifs: dont ie t'en puis bien aſſeurer, par le recit & eſcripture de gens dignes de foy: & ne trouue riens en cela que nature ne puiſſe faire par eſbat, ainſy que pluſieurs aultres choſes, dont tous les iours nous uoyõs l'experiẽce.

Le monſtre marin ayant facon d'un moyne.

c.i.

38 Monk fish from *La nature & diversité des poissons* (1555).

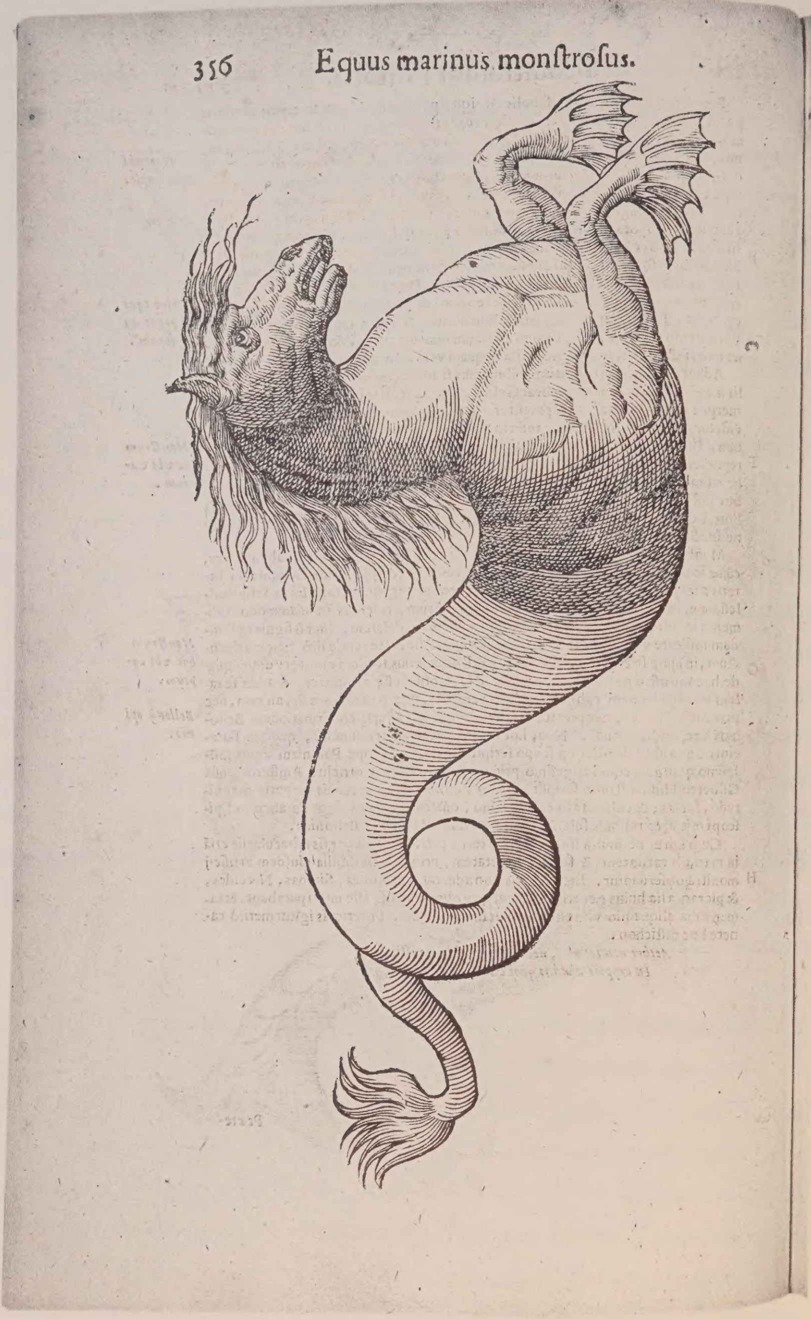
two significant treatises in which he improved upon the scientific descriptions of fish by his predecessor.[288] Belon and Rondelet are often regarded as the founders of modern ichthyology as a result of their compilation of sources on the subject and for their approach to produce descriptions that, in a number of cases, originated from direct and comparative observations of the anatomy of fish (including marine mammals, reptiles, and shellfish).[289]

Both Belon and Rondelet admitted into their innovative works on fish one of the most significant monsters of the sixteenth century. Albertus and Cantimbré list the giant creature known as the sea monk or monk fish in their medieval bestiaries and it also appears in the early-modern books of Lycosthenes (1557), Gessner (1558), and Sluperius (1572).[290] In *De animalibus*, for example, Albertus Magnus claims that the *monachus marinus* has the 'head of a monk who has been recently tonsured' and explains that the creature 'entices those travelling on the sea until it lures them in' before it takes its victims to the bottom of the ocean to devour their flesh.[291] Aside from referencing earlier sources, Belon and Rondelet's information on the creature also derive from recent sightings of the monster in the Øresund, the strait between Denmark and Sweden, between the years 1545 and 1550.[292] In the French translation of *La nature & diversité des poissons* (1555), Belon describes a 'fish with the habit of a monk', along with a woodcut illustration that returns in later depictions of the monster. Likewise, various editions of Rondelet's *Libri de piscibus marinis* contain a replica of the monk fish in addition to reports of hybrid creatures like the sea bishop or the sea lion. The monk fish continued to exist in the works of Aldrovandi (1642) and Schott (1662) and other naturalists who invoked popular reports of the monster and reproduced earlier descriptions of the sea monk in their volumes of natural histories published in the seventeenth century.

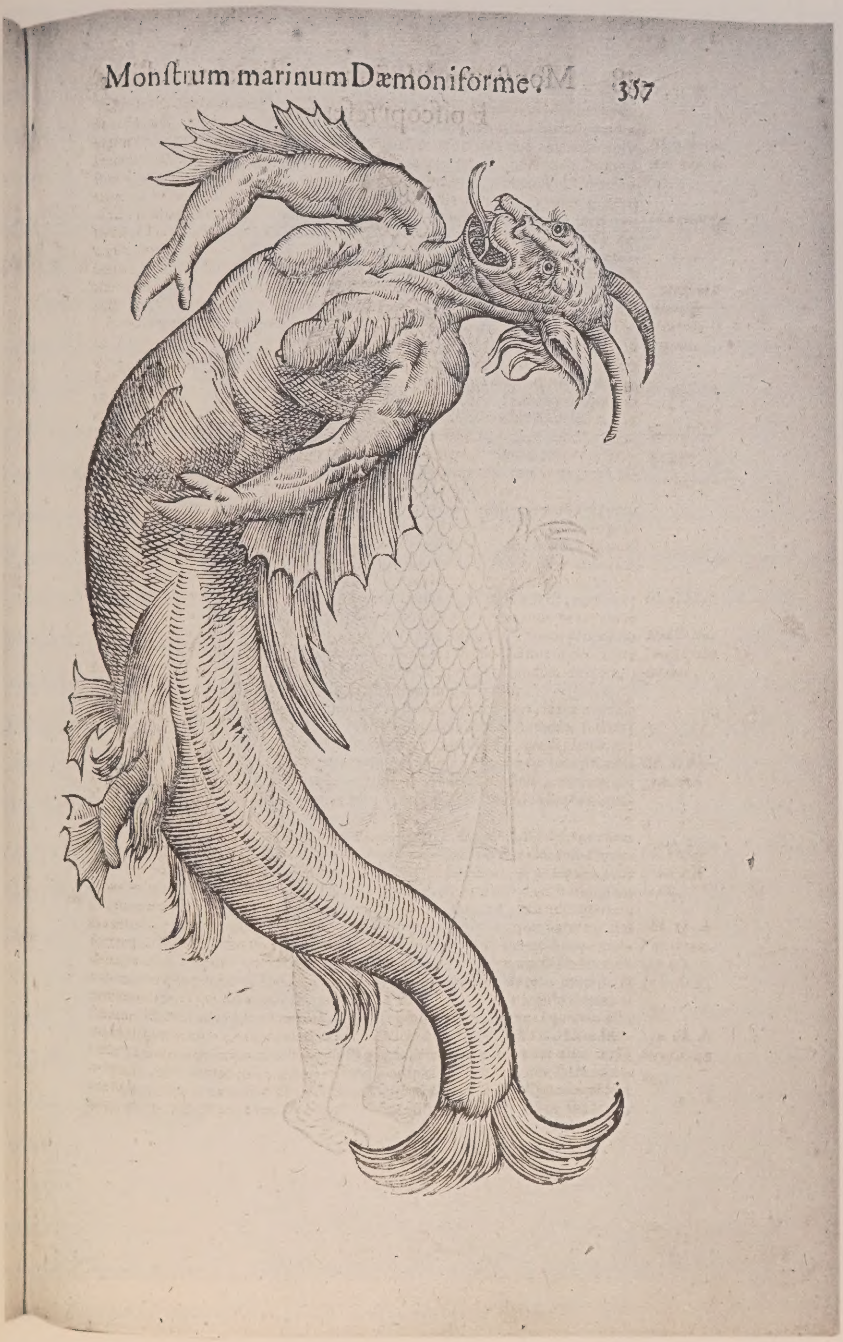
39 **Ulisse Aldrovandi (1522–1605).** ***Serpentarum et draconum historiae.*** **Bologna: Clementem Ferronium, 1640.**

40 **Ulisse Aldrovandi (1522–1605).** ***Monstrorum historia cum Paralipomenis historiae omnium animalium.*** **Bologna: Nicolai Tebaldini, 1642.**

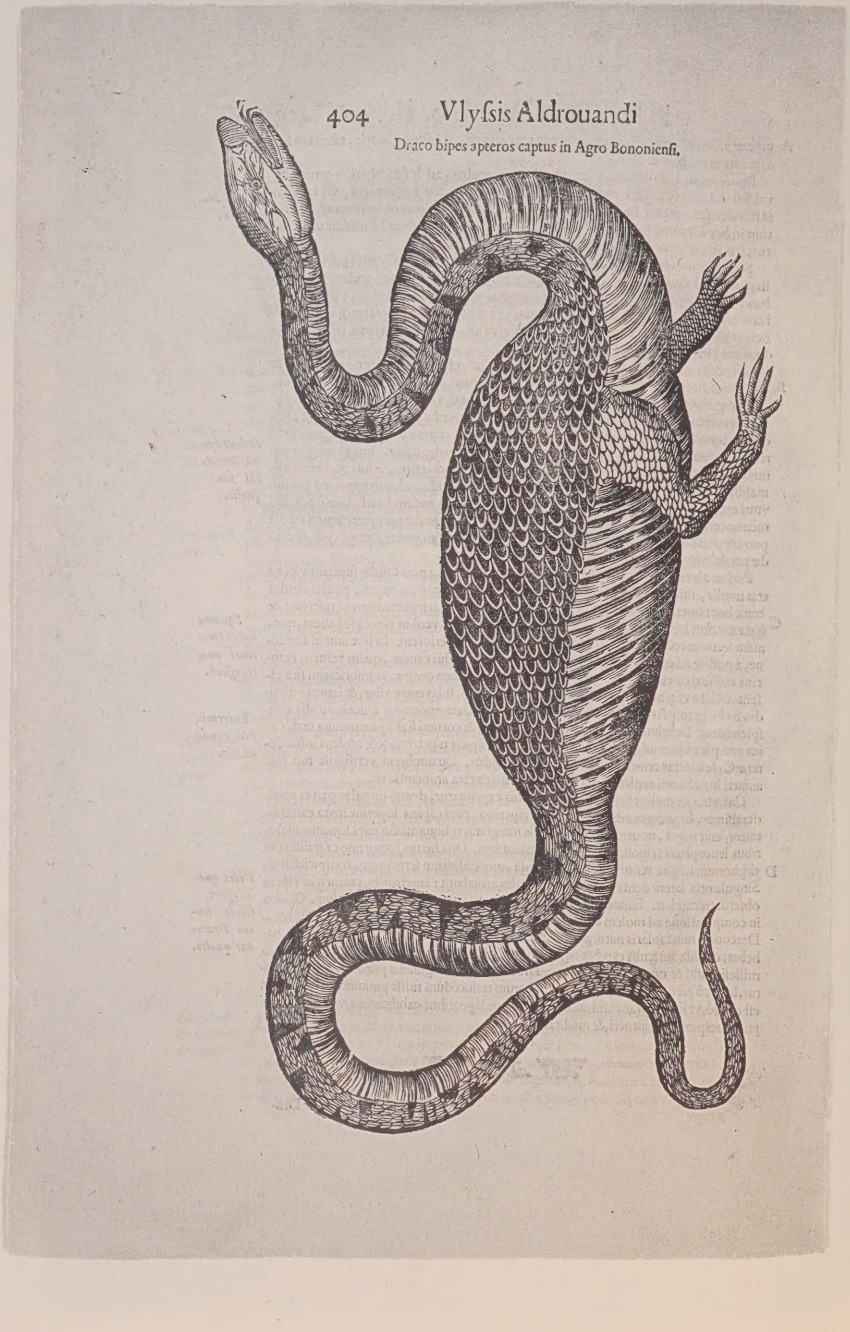
The celebrated Bolognese naturalist Ulisse Aldrovandi frequently signed his books with the inscription 'Ulisse Aldrovandi and friends.'[293] Such a peculiar mark of ownership encapsulates in one brief statement the ethos of Aldrovandi and his 'friends'—an international community of patrons, naturalists, collectors, artists, merchants, students,



356 Equus marinus monſtroſus.


Monſtrum marinum Dæmoniforme.
357

40 Sea monsters from *Monstrorum historia* (1642).



404 Vlyſsis Aldrouandi

Draco bipes apteros captus in Agro Bononienſi.

39 ‘Dragon of Bologne’ from *Serpentarum et draconum historiae* (1640).

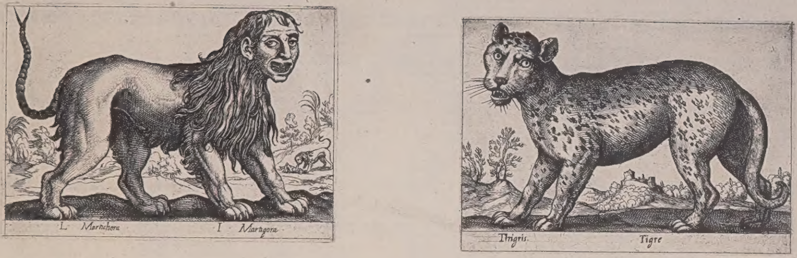
amanuenses, and citizens of the 'Republic of Letters' whose joint efforts helped transform natural history into a formal discipline over the course of the sixteenth century.[294] Indeed, collaboration is at the heart of Aldrovandi's body of writings. To examine the complex production of the thirteen volumes of Aldrovandi's encyclopedia of natural history is to witness the manifestation of a print culture which, during the Renaissance, relied upon the widespread practices of collecting natural specimens and sharing scientific information via letters among naturalists.[295]

In the same spirit of Gessner's zoological works, Aldrovandi spent almost three decades collecting sources to identify and describe every component of the natural world and, in doing so, produced the most ambitious publishing enterprise of the seventeenth century on natural history. When the naturalist died in 1605, the *Studio Aldrovandi* was established to preserve a library of 3,598 printed books and over three hundred manuscripts.[296] The *Studio* also contained Aldrovandi's renowned museum which housed at the time some eighteen thousand 'natural things,' seven thousand dried specimens of plants, eight thousand paintings of 'naturalia,' and hundreds of woodcut printing blocks.[297] Even though Aldrovandi only had direct involvement in the publication of the initial volumes for *Ornithologia* (1599, 1600, 1603) and *De animalibus insectis* (1602), his literary successors carried out his legacy by publishing the unfinished nine volumes from 1606 to 1667.[298] With a vast range of primary sources at their disposal, the custodians of the *Studio Aldrovandi* were ultimately responsible for overseeing the publication of the encyclopedia by making available in print the results of decades of labour and collaboration so deeply ingrained in the rich textual, visual, and material legacy of Aldrovandi's library and museum.[299]

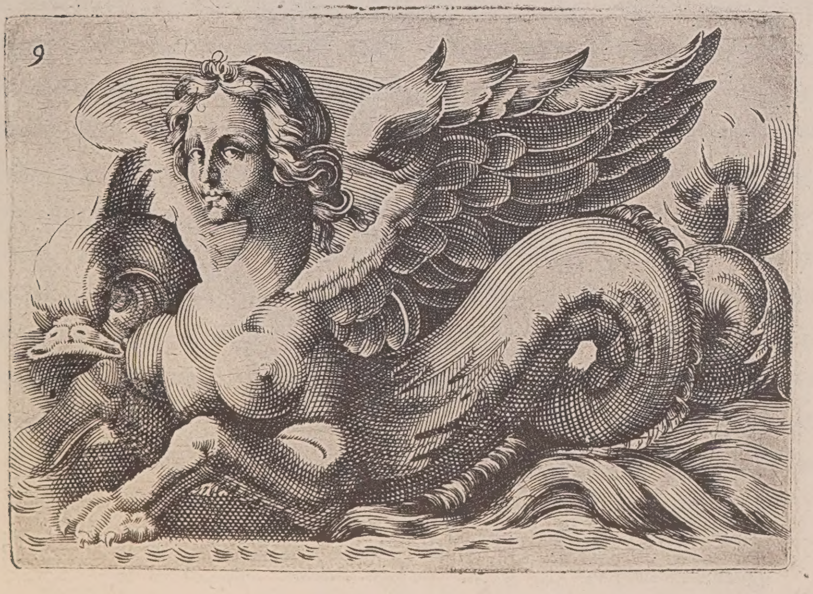
Bartolomeo Ambrosini (1588–1657), custodian of the *Studio Aldrovandi* from 1632 until 1657, edited the volumes of *Serpentium et draconum historia libri duo* (1640) and *Historia monstrorum* (1642) on the basis of Aldrovandi's wealth of research material on these topics.[300] For Aldrovandi, a complete encyclopedia of natural history should also consider the place of monsters in the natural world.[301] For this purpose, he accumulated centuries of classical, medieval, and modern sources in various formats such as manuscripts, printed books, and even specimens.[302] One highlight of these sources is the alleged discovery of a 'dragon' on the outskirts of Bologna on the same day as the investiture of Pope Gregory XIII (1572–1585) in 1572.[303] Aldrovandi welcomed the mysterious specimen into his museum where naturalists, scholars, and patrons sent missives to inquire into the nature and meaning of the portent.[304] As news of the creature travelled across Italy and other parts of Europe, Aldrovandi quickly became the expert on the dragon.[305] But it took thirty-five long years for his interpretations to reach wider audiences with the publication of the print version of his treatise in 1640.[306] In *Serpentum et draconum historiae*, Aldrovandi describes the dragon in the span of sixteen pages where he defines it as a natural phenomenon instead of a portent charged with religious connotations.[307] He also analyzes the anatomy of the creature amid a broader history that covers the folklore, mythology, iconography, and even the medical uses of snakes and dragons. In the end, the dragon of Bologna was nothing more than a hoax, a composite of different animals fabricated by a Renaissance taxidermist.[308]

Aldrovandi's *Historia monstrorum* is one of the most significant contributions of the Renaissance to the history of monsters. First published in 1642 and reprinted in 1658, the book presents an extensive illustrated catalogue of monsters without making a clear distinction between myths and realities or commonly accepted notions of monstrosity.[309] The structure of the book was innovative since it was the first treatise to study monsters based on their form.[310] Traditional monstrous peoples populate the first chapters of the book, followed by numerous accounts of animal and botanical monstrosities, celestial prodigies, fossils, monsters in antiquarian objects, as well as human deformities. Like the rest of the volumes of Aldrovandi's encyclopedia, *Monstrorum historia* is a visually stunning folio illustrated with 477 woodcuts.

Aldrovandi archived over twenty years of readings and observations into the eighty three volumes of his *Pandechion epistemonicon*.[311] On the subject of monsters, the naturalist and his amanuenses filled numerous pages with research notes written on paper and pasted onto the pages in alphabetical order.[312] Ambrosini built upon these existing sources and the contents of the library to edit this tome of almost 800 pages.[313] As a result, *Monstrorum historia* contains every major classical, medieval, and modern source on the subject of monsters. Aldrovandi references Aristotle, Pliny, St Augustine, and other medieval sources in addition to books by Schedel, Gessner, Lycosthenes, Rueff, and numerous contemporary authors, some of whom were eventually included on the *Index of Prohibited Books*.[314] Ambrosini updates the work, supplementing the original sources to cover monsters and events reported after the death of Aldrovandi in 1605.[315] What makes *Monstrorum historia* a pioneer work in the field of Renaissance teratology is the book's extensive coverage of sources, comprehensive categories of monsters, and


L Martichora
I Martigora
Thigris.
Tigre

41 Manticore and tiger from *Nova raccolta* (1650).



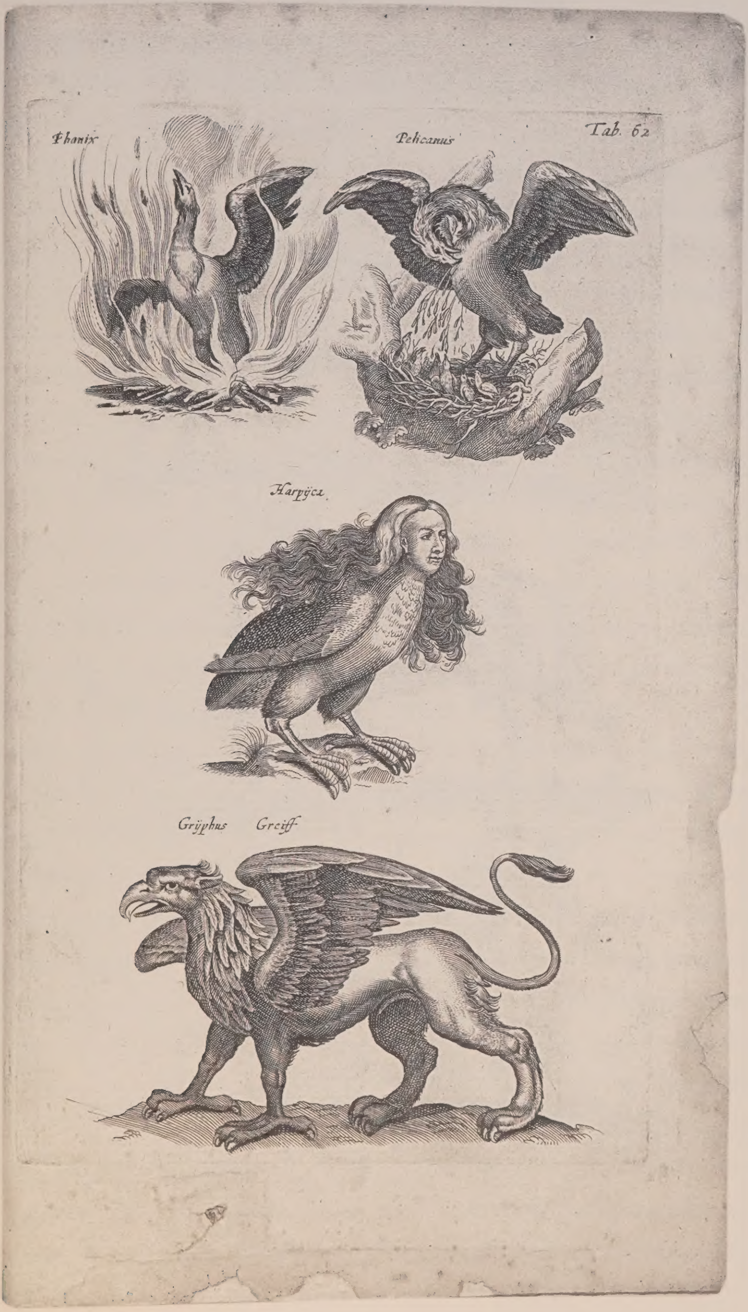
42 Sea monster from *Figure di mostri marini* (1608).

hundreds of woodcut illustrations. For over three hundred years, readers have constantly turned to these resources to learn about monsters in the context of one of the key encyclopedic studies of Renaissance natural history.

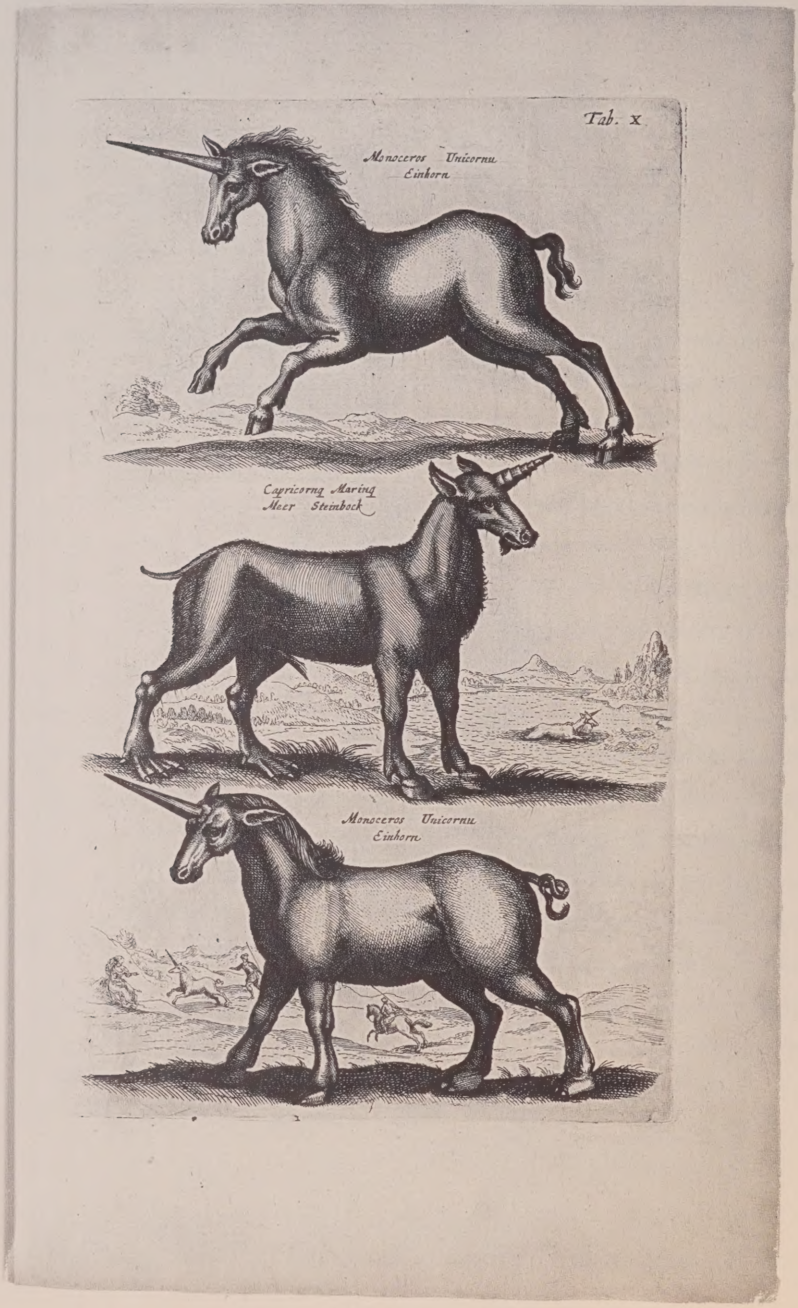
41 Antonio Tempesta (1555–1630). ***Nova raccolta de li animali piu curiosi del mondo.*** **Rome: Giovanni Iacomo Rossi, 1650.**

42 Giovanni Andrea Maglioli (fl. 1580–1610). ***Figure di mostri marini e putti.*** **Rome: Lorenzo Vaccari, 1608.**

Book illustration was a central feature of the print culture of Renaissance natural history. In the context of printed volumes of natural history, woodcuts and engravings provided many of the visual representations of natural specimens as part of the process of generating knowledge about nature during this period.[316] In the album *Nova raccolta de li animali piu curiosi del mondo*, the Florentine artist and printmaker Antonio Tempesta presents 193 etchings of mammals, reptiles, insects, birds, and some fantastic creatures designed to 'provoke wonder.'[317] He illustrates the manticore, the griffin, the unicorn, and other mythical creatures of antiquity. Tempesta was one of the most prolific engravers of the early-modern period with 1,461 prints attributed to him on a variety of religious and historical themes as well as mythological subjects, battle and hunting scenes, processions and ceremonies, and images of animals.[318] He also published an earlier undated set of natural history illustrations titled *La curiosa raccolta di diversi animali quadrupedi*. Giovanni Andrea Maglioli, an Italian artist and designer of ornamental prints, produced a series of sixteen engravings depicting cherubs and sea monsters which were printed in Rome by Lorenzo Vaccari in 1608. The engravings combine the lore of the sea monsters with the aesthetic of the grotesque popularized in all forms of art in sixteenth-century Italy. Renaissance collectors held these books of prints as prized possessions in their museums and libraries because they were able to display artistic renditions of unobtainable specimens of exotic animals of distant lands, monstrous creatures, and curiosities of the natural world.[319]


Phœnix
Pelicanus
Tab. 62
Harpyia
Gryphus
Greiff

43 Mythical birds from *Historiae naturalis de avibus* (1650).


Tab. x
Monoceros Unicornu
Einhorn
Capricornq Marinq
Meer Steinbock
Monoceros Unicornu
Einhorn

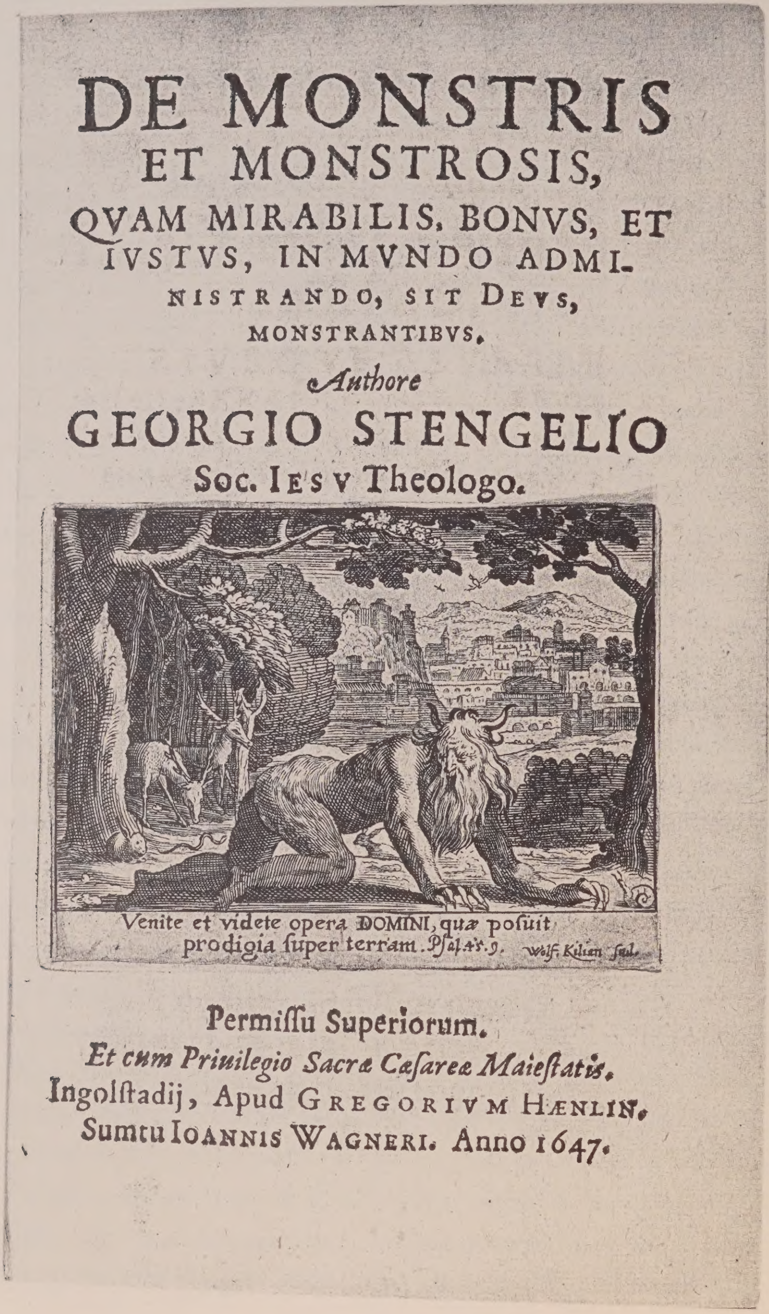
44 Unicorns from *Historiæ naturalis de quadrupedibus* (1657).

43 John Jonston (1603–1675). *Historiae naturalis de avibus.*
Frankfurt: Matthäus Merian, 1650.

44 John Jonston (1603–1675). *Historiæ naturalis de quadrupedibus libri.*
Amsterdam: Johann Schipper, 1657.

Following the footsteps of Gessner and Aldrovandi, the Polish physician and natural historian John Jonston aspired to revive the study of natural history with the publication of the six volumes of his zoological encyclopedia between 1650 and 1653.[320] Jonston was strongly influenced by theories on the transformative power of education expressed by a number of seventeenth-century naturalists, particularly Francis Bacon (1561–1626) and Johann Valentin Andreae (1586–1654).[321] In addition, he also found inspiration in the realistic approach introduced in the natural history treatises of the New World, namely the *Historia naturalis Brasiliae* (1648) of Georg Marcgrave (1610–1644) and Willem Piso (1611–1678).[322] Jonston made a significant contribution to pre-modern natural history by focusing on the 'world of things' as a way to draw concise, accurate, and independent descriptions of natural history subjects.[323] This means that Jonston saw nature differently from the 'emblematic worldview' of his forerunners whose descriptions of animals, for example, rested on demonstrating the similarities among species or groups of animals instead of outlining their qualities as individual entities.[324]

Jonston's *Historia naturalis* is still dependent on the textual legacy of his predecessors.[325] Despite conducting first-hand observations, he mostly relies upon the books of Aristotle and Pliny on animals while also referencing the works of Gessner, Aldrovandi, and other zoological treatises of the period.[326] This is why his works remain true to the traditional elements of earlier natural histories in their treatment of monsters and mythological creatures.[327] Similar to Topsell's views on monsters, Jonston is critical of his sources yet he leaves it to the readers to determine what to make of the accounts of monstrous creatures in his books.[328] In the appendix to his *Historiae naturalis de avibus* (1650), Jonston describes the qualities of the three mythical birds—the griffin, the phoenix, and the harpyca—which he draws from classical, medieval, and modern sources, while in *Historiæ naturalis de quadrupedibus libri* (1657), he includes numerous accounts of unicorns and monstrous animals like the manticore and the griffin, now classified as a quadruped. Jonston introduces these monstrous animals in order to delight his readers as they learn about the wonders of nature from the pages of his encyclopedia of natural history.[329]



DE MONSTRIS
ET MONSTROSIS,
QVAM MIRABILIS, BONVS, ET
IVSTVS, IN MVNDO ADMINISTRANDO,
SIT DEVS,
MONSTRANTIBVS.
Authore
GEORGIO STENGELIO
Soc. IESV Theologo.

Venite et videte opera DOMINI, quæ poſuit
prodigia ſuper terram. Pſal. 45. 9.

Wolf. Kilian ſcul.

Permiſſu Superiorum.
Et cum Priuilegio Sacræ Cæſareæ Maieſtatis.
Ingolſtadij, Apud GREGORIVM HÆNLIN.
Sumtu IOANNIS WAGNERI. Anno 1647.

45 Wild creature from *De monstris* (1647).

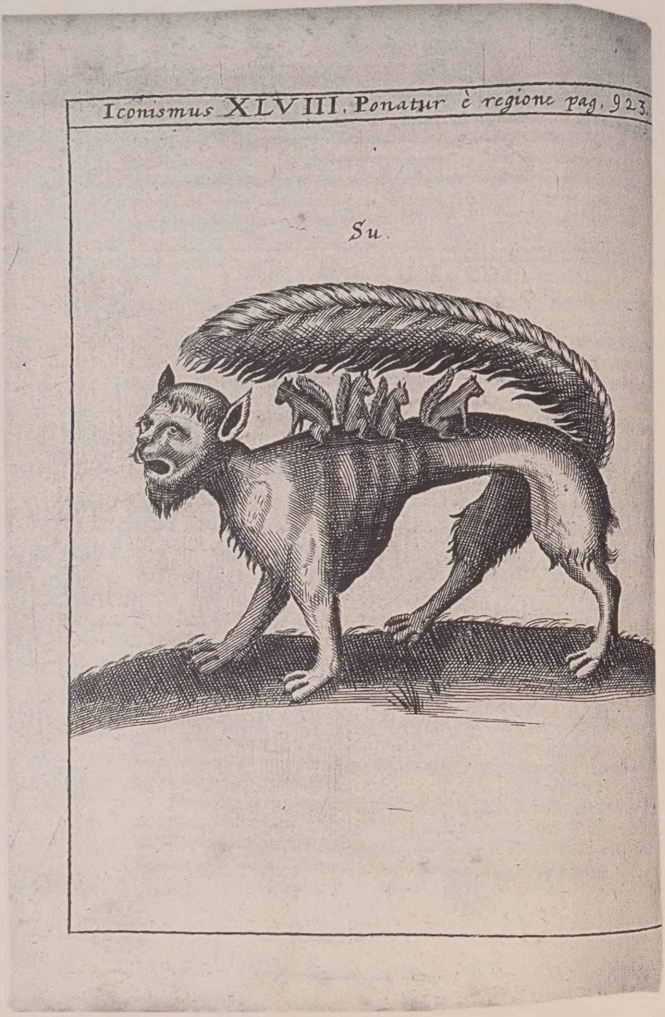
45 Georg Stengel (1584–1651). *De monstris et monstrosis*. Ingolstadt: Gregor Haenlin, 1647.

The Jesuit philosopher and theologian Georg Stengel wrote his treatise on monsters at a crucial moment in the study of natural philosophy in Jesuit institutions in Germany.[330] The Scholastic tradition, founded on Aristotelian logic and the writings of the early Church Fathers, was gradually superseded by new methods and modern authorities in natural philosophy.[331] In the course of their education, Jesuits learned the main principles of the 'speculative sciences' of metaphysics, physics, and mathematics.[332] Published in 1647, *De monstris et monstrosis* responds, to some extent, to the requirement of physics to understand natural bodies, their matter, form, and causes for their changes.[333] In this book, Stengel not only investigates the natural causes of monsters as 'physical bodies' but he also considers their theological implications in the framework of seventeenth-century natural philosophy.[334]

Stengel suggests at the outset of the book that monsters are natural phenomena which originate in deviations from the normal dispositions of their kind. The more a monster departs from the normal form, the more its body becomes monstrous. In the course of seventeen chapters, Stengel asks a series of didactic questions to explore the nature of monstrosity in humans, animals, vegetables, and minerals. His work encompasses monstrous births, as well as human deformities and abnormalities, monstrous animals according to their habitats, and even delves into notions of demonology and witchcraft. Stengel cites a range of authorities on natural history such as Pliny, Solinus, Isidore of Seville, Albertus Magnus, along with the more recent writings of Münster and Lycosthenes. The only illustration in the book appears on the title-page and it depicts a wild creature also found in Lycosthenes, Aldrovandi, and Schott. Stengel is consistent with contemporary authorities on the subject of monsters since he poses intriguing questions, not to corroborate the existence of monsters but as a way to elaborate on the principles of natural philosophy.[335]

46 Caspar Schott (1608–1666). *Physica curiosa, sive Mirabilia naturæ et artis*. Würzburg: Johann Andreas Endteri, 1667.

On 19 May 1664, the German Jesuit mathematician and natural philosopher Caspar Schott sent a letter to one of his correspondents requesting sources for the second edition of his popular compendium of monsters and wonders of nature. 'Fr. Caspar Schott asks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Su.

46 The ‘Su’ from *Physica curiosa* (1667).

the most illustrious Baron,’ reads the brief letter, ‘if he should have any book of curiosities, from which something might be taken for the *Physica curiosa* which was published last year and is now to be reissued.’[336] In less than a decade (1657–1666), Schott compiled sources from books and his own correspondence into twelve manuscripts volumes covering various elements of natural philosophy, ten of which were published under his guidance prior to his death.[337] *Physica curiosa* originally appeared in 1662, and the second edition of 1667 contained over six hundred pages of new material added to what was already an eclectic taxonomical treatise on monsters and natural wonders.[338] *Physica curiosa*, like Schott's *Magia naturalis* (1657–1659) and *Technica curiosa* (1664), were conceived with the purpose of renewing the study of mathematics, physics, and natural magic among seventeenth-century readers in Germany and other parts of Europe.

Schott discusses the wonders and secrets of nature in the twelve chapters of his *Physica curiosa*.[339] The book begins with supernatural wonders such as demons, angels, ghosts, and apparitions before it turns its attention to monstrous peoples and births, portents, as well as monstrous animals, and natural wonders. Besides engaging the narrative of demonology with the field of teratology, Schott offers little original material or new interpretations on these subjects and most of the engravings in the book are drawn directly from earlier sources, especially from Aldrovandi.[340] *Physica curiosa* is, above all, an encyclopedia that brings under the umbrella of 'natural magic' every monster that has existed in the pages of medieval encyclopedias, world histories, wonder books, cosmographies, travel narratives, natural histories, and medical treatises.

Part IV:
On Monstrous Bodies

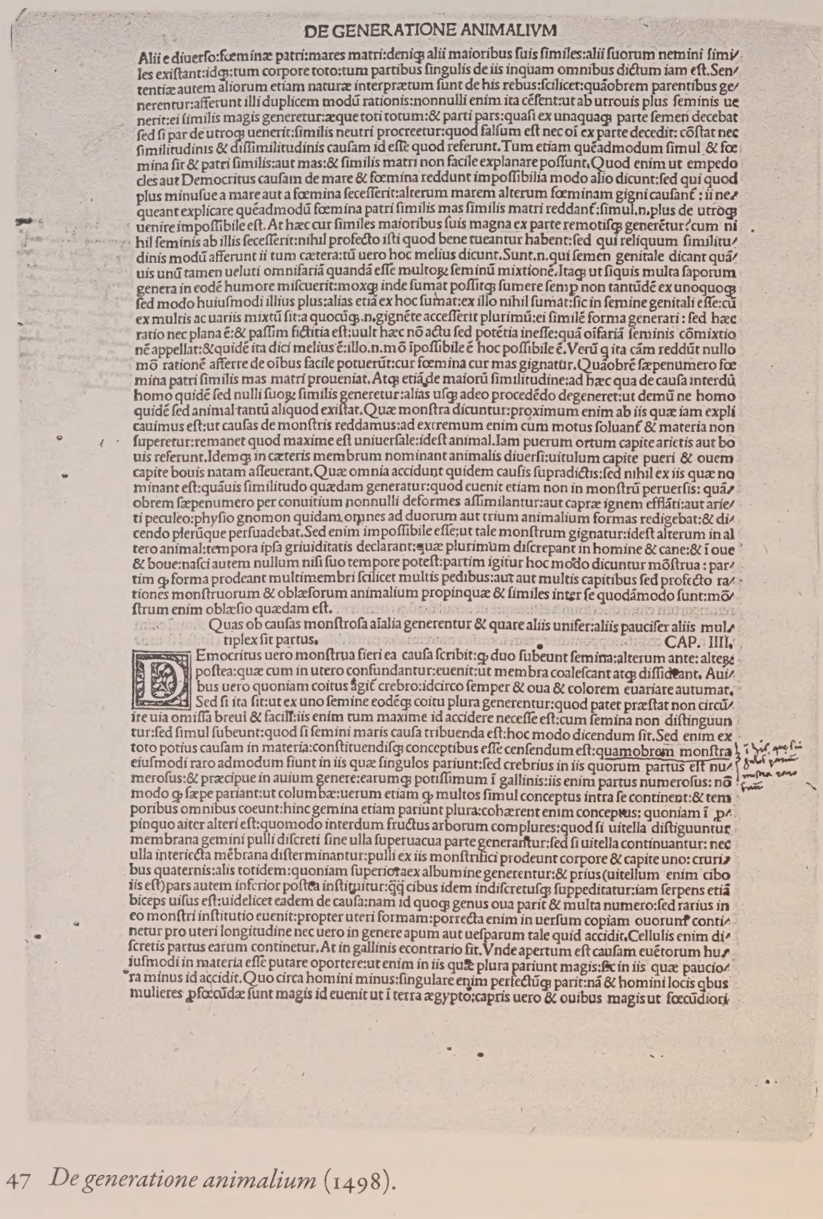
Teratology—originally defined as the study of fantastic creatures and monsters—has a long history dating back to Antiquity when 'monstrous births' were closely tied to the traditions of monsters as errors of nature and religious omens. Reports of conjoined twins, extreme forms of congenital deformities, and human-animal hybrids circulated in nearly every book dealing with monsters published before the end of the eighteenth century. The monsters in these accounts generally challenged the limits of humanity and posed a threat to the laws of nature as evidence of the divine power. The monsters of medieval encyclopedias and Renaissance wonder books remained credible until the emergence of modern theories based on empirical scientific and medical methods in the nineteenth century. The proponents of the new discipline of teratology—defined today as the scientific study of congenital abnormalities and abnormal formations— for decades exploited the tired language and beliefs of earlier sources despite advances in embryology and pathology. For this reason, the concept of material impression and other long-discredited medical theories informed popular ideas on reproduction until the end of the Victorian period. Today, the output of nineteenth-century teratology evinces the long and complex history of labeling real human bodies as monsters. These books also intersect with contemporary revisions of ideas of race, gender, sexuality, and class by feminist scholars and academics in disability studies and medical humanities.

47 Aristotle (384–322 B.C.). *De generatione animalium.*
Venice: Bartolomeo Zanni for Octaviano Scotto, 1498.

Aristotle was possibly the most prominent ancient philosopher studied during the Renaissance. His corpus circulated in more than 150 editions in the fifteenth century and over fourteen hundred editions were published before the end of the sixteenth century.[341] Renaissance natural historians adhered to the Aristotelian principles of studying the natural world in terms of its causes, classifications, and purposes.[342] His zoological works in particular have long remained fundamental to the formulation of theories on the origins of monsters. Gessner and Aldrovandi's encyclopedias of natural history, for example, reaffirmed Aristotle's assessment that monstrous animals are random errors of nature, as much as they advanced the more credulous views of Pliny and his supporters. But, in his writings, Aristotle devoted more attention to understanding the causes of human and animal congenital abnormalities as opposed to exploring the lore of mythical monstrous creatures.[343] For this reason Aristotle's theories on the natural causes of monsters, especially monstrous births, dominated the field of teratology from the Renaissance until the nineteenth century.[344]

In the fourth book of his *Generation of Animals*, Aristotle proposes one of the foundational theories on the origins of monsters. Aristotle argues that 'anyone who does not take after his parents is really in a way a monstrosity.'[345] In this view, monsters are the product of errors which originate at the time of the conception and gestation of humans and animals. According to Aristotle, the first sign of monstrosity occurs when a female is conceived rather than a male, while most errors materialize the moment the female contribution overpowers its counterpart during conception.[346] Aristotle's conception theory inaugurates a scientific tradition in the study of monsters, one that justifies male dominance and conceives the female body as a prime cause of monstrosity.[347] However, Aristotle and other ancient writers also believed there was another powerful cause for monsters and monstrous births: the female imagination.[348]

Early-modern accounts of monstrous births relied on the idea of the power of the female imagination to generate monsters. The mother's most hidden desires, feelings, or fears were thought to manifest themselves in their progeny through the power of imagination.[349] Giambattista della Porta (1535–1615), for example, argues in his *Magiae naturalis* (1558) that the 'conceit of the mind, and the force of imagination is great' and that the mother's fixation with things or images may 'so imprint the likeness of the thing



DE GENERATIONE ANIMALIVM

Alii e diuerſo:fœminæ patri:mares matri:deniq; alii maioribus ſuis ſimiles:alii ſuorum nemini ſimiles exiſtant:idq;:tum corpore toto:tum partibus ſingulis de iis inquam omnibus dictum iam eſt.Sententiæ autem aliorum etiam naturæ interprætum ſunt de his rebus:ſcilicet:quãobrem parentibus generentur:afferunt illi duplicem modũ rationis:nonnulli enim ita cẽſent:ut ab utrouis plus ſeminis uenerit:ei ſimilis magis generetur:æque toti totum:& parti pars:quaſi ex unaquaq; parte ſemen decebat ſed ſi par de utroq; uenerit:ſimilis neutri procreetur:quod falſum eſt nec oĩ ex parte decedit: cõſtat nec ſimilitudinis & diſſimilitudinis cauſam id eſſe quod referunt.Tum etiam quẽadmodum ſimul & fœmina ſit & patri ſimilis:aut mas:& ſimilis matri non facile explanare poſſunt.Quod enim ut empedocles aut Democritus cauſam de mare & fœmina reddunt impoſſibilia modo alio dicunt:ſed qui quod plus minuſue a mare aut a fœmina ſeceſſerit:alterum marem alterum fœminam gigni cauſanť : ii nequeant explicare quẽadmodũ fœmina patri ſimilis mas ſimilis matri reddanť:ſimul.n.plus de utroq; uenire impoſſibile eſt.At hæc cur ſimiles maioribus ſuis magna ex parte remotiſq; generẽtur?cum nihil ſeminis ab illis ſeceſſerit:nihil profecto iſti quod bene tueantur habent:ſed qui reliquum ſimilitudinis modũ afferunt ii tum cætera:tũ uero hoc melius dicunt.Sunt.n.qui ſemen genitale dicant quãuis unũ tamen ueluti omnifariã quandã eſſe multoꝝ ſeminũ mixtionẽ.Itaq; ut ſiquis multa ſaporum genera in eodẽ humore miſcuerit:moxq; inde ſumat poſſitq; ſumere ſemp non tantũdẽ ex unoquoq; ſed modo huiuſmodi illius plus:alias etiã ex hoc ſumat:ex illo nihil ſumat:ſic in ſemine genitali eſſe:cũ ex multis ac uariis mixtũ ſit:a quocũq;.n.gignẽte acceſſerit plurimũ:ei ſimilẽ forma generari : ſed hæc ratio nec plana ẽ:& paſſim fictitia eſt:uult hæc nõ actu ſed potẽtia ineſſe:quã oĩfariã ſeminis cõmixtionẽ appellat:& quidẽ ita dici melius ẽ:illo.n.mõ ĩpoſſibile ẽ hoc poſſibile ẽ.Verũ q ita cãm reddũt nullo mõ rationẽ afferre de oĩbus facile potuerũt:cur fœmina cur mas gignatur.Quãobrẽ ſæpenumero fœmina patri ſimilis mas matri proueniat.Atq; etiã de maiorũ ſimilitudine:ad hæc qua de cauſa interdũ homo quidẽ ſed nulli ſuoꝝ ſimilis generetur:alias uſq; adeo procedẽdo degeneret:ut demũ ne homo quidẽ ſed animal tantũ aliquod exiſtat.Quæ monſtra dicuntur:proximum enim ab iis quæ iam explicauimus eſt:ut cauſas de monſtris reddamus:ad extremum enim cum motus ſoluanť & materia non ſuperetur:remanet quod maxime eſt uniuerſale:ideſt animal.Iam puerum ortum capite arietis aut bouis referunt.Idemq; in cæteris membrum nominant animalis diuerſi:uitulum capite pueri & ouem capite bouis natam aſſeuerant.Quæ omnia accidunt quidem cauſis ſupradictis:ſed nihil ex iis quæ nominant eſt:quãuis ſimilitudo quædam generatur:quod euenit etiam non in monſtrũ peruerſis: quãobrem ſæpenumero per conuitium nonnulli deformes aſſimilantur:aut capræ ignem efflãti:aut arieti peculeo:phyſio gnomon quidam omnes ad duorum aut trium animalium formas redigebat:& dicendo plerũque perſuadebat.Sed enim impoſſibile eſſe;ut tale monſtrum gignatur:ideſt alterum in altero animal:tempora ipſa griuiditatis declarant:quæ plurimum diſcrepant in homine & cane:& ĩ oue & boue:naſci autem nullum niſi ſuo tempore poteſt:partim igitur hoc modo dicuntur mõſtrua : partim ꝙ forma prodeant multimembri ſcilicet multis pedibus:aut aut multis capitibus ſed profecto rationes monſtruorum & oblæſorum animalium propinquæ & ſimiles inter ſe quodãmodo ſunt:mõſtrum enim oblæſio quædam eſt.

Quas ob cauſas monſtroſa aĩalia generentur & quare aliis unifer:aliis paucifer aliis multiplex ſit partus. CAP. IIII.

DEmocritus uero monſtrua fieri ea cauſa ſcribit:ꝙ duo ſubeunt ſemina:alterum ante: alteꝝ poſtea:quæ cum in utero confundantur:euenit:ut membra coaleſcant atq; diſſideant. Auibus uero quoniam coitus agiť crebro:idcirco ſemper & oua & colorem euariare autumat. Sed ſi ita ſit:ut ex uno ſemine eodẽq; coitu plura generentur:quod patet præſtat non circũire uia omiſſa breui & facilĩ:iis enim tum maxime id accidere neceſſe eſt:cum ſemina non diſtinguuntur:ſed ſimul ſubeunt:quod ſi ſemini maris cauſa tribuenda eſt:hoc modo dicendum ſit.Sed enim ex toto potius cauſam in materia:conſtituendiſq; conceptibus eſſe cenſendum eſt:quamobrem monſtra eiuſmodi raro admodum fiunt in iis quæ ſingulos pariunt:ſed crebrius in iis quorum partus eſt numeroſus:& præcipue in auium genere:earumq; potiſſimum ĩ gallinis:iis enim partus numeroſus: nõ modo ꝙ ſæpe pariant:ut columbæ:uerum etiam ꝙ multos ſimul conceptus intra ſe continent:& temporibus omnibus coeunt:hinc gemina etiam pariunt plura:cohærent enim conceptus: quoniam ĩ ꝓpinquo aiter alteri eſt:quomodo interdum fructus arborum complures:quod ſi uitella diſtiguuntur membrana gemini pulli diſcreti ſine ulla ſuperuacua parte generantur:ſed ſi uitella continuantur: nec ulla interiecta mẽbrana diſterminantur:pulli ex iis monſtrifici prodeunt corpore & capite uno: cruribus quaternis:alis totidem:quoniam ſuperiora ex albumine generentur:& prius(uitellum enim cibo iis eſt)pars autem inferior poſtea inſtituitur:q̃q̃ cibus idem indiſcretuſq; ſuppeditatur:iam ſerpens etiã biceps uiſus eſt:uidelicet eadem de cauſa:nam id quoq; genus oua parit & multa numero:ſed rarius in eo monſtri inſtitutio euenit:propter uteri formam:porrecta enim in uerſum copiam ouorum continetur pro uteri longitudine nec uero in genere apum aut ueſparum tale quid accidit.Cellulis enim diſcretis partus earum continetur.At in gallinis econtrario fit.Vnde apertum eſt cauſam euẽtorum huiuſmodi in materia eſſe putare oportere:ut enim in iis quæ plura pariunt magis:ſic in iis quæ pauciora minus id accidit.Quo circa homini minus:ſingulare enim perfectũq; parit:nã & homini locis q̃bus mulieres ꝓfœcũdæ ſunt magis id euenit ut ĩ terra ægypto:capris uero & ouibus magis ut fœcũdiori

ĩ his que ſin
gulos pariunt
monſtra raro
fiunt

47 *De generatione animalium* (1498).

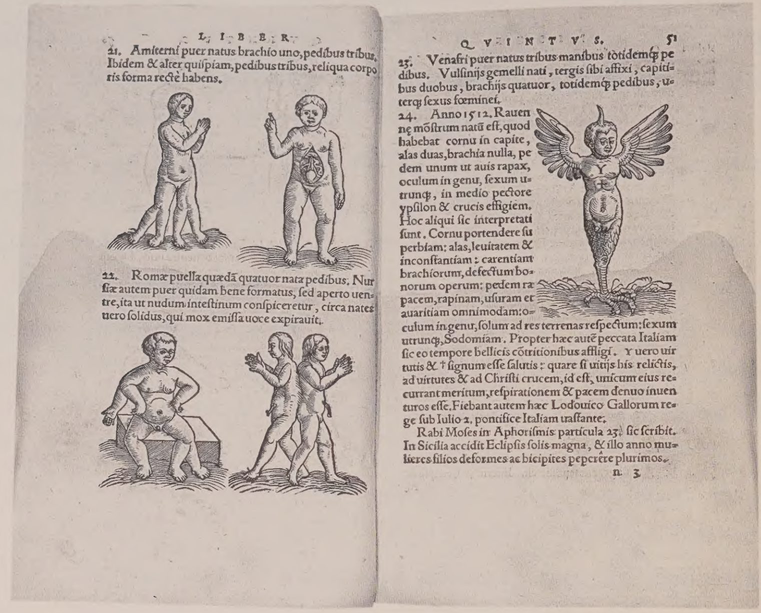
mused upon, in the tender substance of the child.'[350] Reports of conjoined twins, hermaphrodites, hybrid creatures, newborns with severe congenital disorders, missing or additional limbs, and strange birthmarks circulated widely across Europe in the pages of books, pamphlets, and broadsides. Some of these accounts identified the power of the maternal imagination or impression as the main cause for monstrous births whereas others simply upheld the opinion that the limited role of the female in procreation could not produce any extreme variation at all.[351] But most early modern reports still alluded in some way to the tradition of interpreting monstrous births as portents or divine prodigies.[352] Altogether, Aristotle's *Generation of Animals* remained an essential authority for these teratological accounts because his writings provided the means to comprehend the workings of nature in the conception of monstrous bodies.[353]

48 **Jakob Rueff (1500–1558).** ***De conceptu et generatione hominis.*** **Zurich: Christoph Froschauer, 1554.**

49 **Jakob Rueff (1500–1558).** ***De conceptu et generatione hominis.*** **Frankfurt: Georg Rab, 1580.**

In 1554, Swiss physician Jakob Rueff published a treatise on the generation and births of humans. Though Rueff's *De conceptu et generatione hominis* became a popular textbook for midwives and surgeons, the book would reach an even wider audience since concurrent German and Latin editions were strategically published in the heyday of treatises of teratology in Europe.[354] Modelled after the *Der Rosengarten* (1513) of Eucharius Rösslin (ca. 1470–1526), the book appeared in at least five editions before the publication of the popular English translation in 1637 under the title *The Expert Midwife, or an Excellent and Most Necessary Treatise of the Generation and Birth of Man.* The edition of 1580 contains a set of woodcuts by the prolific artist Jost Amman (1539–1591), whose illustrations were later reproduced in the works of Paré (1573), Aldrovandi (1642), Liceti (1665), and others.

De conceptu et generatione hominis was an innovative text in the field of teratology because its focal point was to study the natural causes of monstrous births instead of just interpreting them from within the scope of religious portents.[355] Aristotle's theory of sexual generation plays a key role in the descriptions of the natural causes of certain monstrous births present in the book.[356] But Rueff strikes a balance in his interpretations. He reassures his readers that, regardless of the natural causes, the ultimate origin of



LIBER

21. Amiterni puer natus brachio uno, pedibus tribus. Ibidem & alter quiſpiam, pedibus tribus, reliqua corporis forma rectè habens.

22. Romæ puella quædā quatuor nata pedibus. Nurſiæ autem puer quidam bene formatus, ſed aperto uentre, ita ut nudum inteſtinum conſpiceretur, circa nates uero ſolidus, qui mox emiſſa uoce expirauit.

QVINTVS. 51

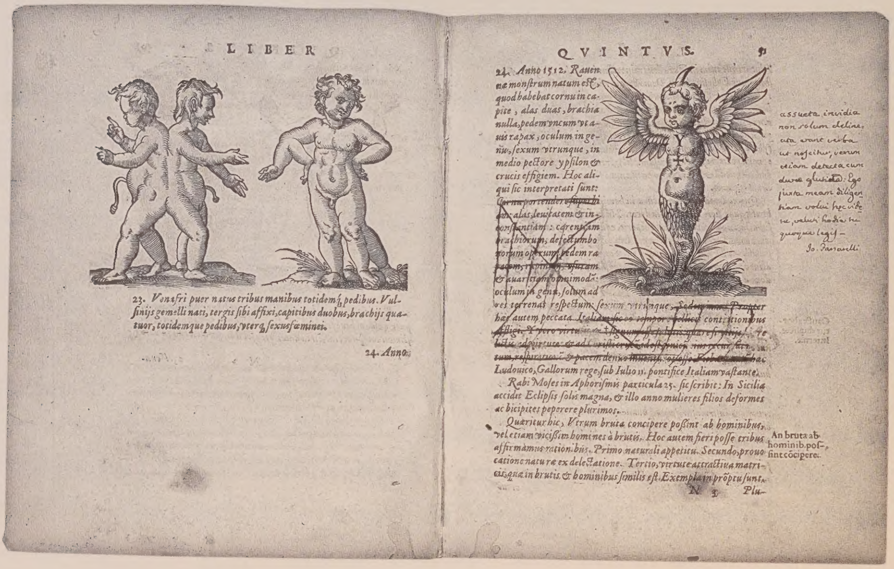
23. Venafri puer natus tribus manibus totidemq́ pedibus. Vulſinijs gemelli nati, tergis ſibi affixi, capitibus duobus, brachijs quatuor, totidemq́ pedibus, uterq́ ſexus fœminei.

24. Anno 1512. Rauennę mõſtrum natū eſt, quod habebat cornu in capite, alas duas, brachia nulla, pedem unum ut auis rapax, oculum in genu, ſexum utrunq́, in medio pectore ypſilon & crucis effigiem. Hoc aliqui ſic interpretati ſunt. Cornu portendere ſuperbiam: alas, leuitatem & inconſtantiam: carentiam brachiorum, defectum bonorum operum: pedem rapacem, rapinam, uſuram et auaritiam omnimodam: oculum in genu, ſolum ad res terrenas reſpectum: ſexum utrunq́, Sodomiam. Propter hæc autē peccata Italiam ſic eo tempore bellicis cõtritionibus affligi. Y uero uirtutis & † ſignum eſſe ſalutis: quare ſi uitijs his relictis, ad uirtutes & ad Chriſti crucem, id eſt, unicum eius recurrant meritum, reſpirationem & pacem denuo inuenturos eſſe. Fiebant autem hæc Lodouico Gallorum rege ſub Iulio 2. pontifice Italiam uaſtante.

Rabi Moſes in Aphoriſmis particula 23. ſic ſcribit. In Sicilia accidit Eclipſis ſolis magna, & illo anno mulieres filios deformes ac bicipites pepcrêre plurimos.

n 3

48 Monstrous births from *De conceptu et generatione hominis* (1554).



LIBER

23. *Venafri puer natus tribus manibus totidemq́ pedibus. Vulſinijs gemelli nati, tergis ſibi affixi, capitibus duobus, brachijs quatuor, totidemque pedibus, vterq́ ſexus fæminei.*

24. *Anno*

QVINTVS. 91

24. *Anno 1512. Rauennæ monſtrum natum eſt, quod habebat cornu in capite, alas duas, brachia nulla, pedem vncum vt auis rapax, oculum in genu, ſexum vtrunque, in medio pectore ypſilon & crucis effigiem. Hoc aliqui ſic interpretati ſunt: ~~Cornu portendere ſuperbiam: alas, leuitatem & inconſtantiam: carentiam brachiorum, defectum bonorum operum: pedem rapacem, rapinam, uſuram & auaritiam omnimodã: oculum in genu, ſolum ad res terrenas reſpectum: ſexum vtrunque, Sodomiam. Propter hæc autem peccata Italiam ſic eo tempore bellicis contritionibus affligi. Y vero virtutis & † ſignum eſſe ſalutis: quare ſi vitijs his relictis, ad virtutes & ad Chriſti crucem, id eſt, vnicum eius recurrant meritum, reſpirationẽ & pacem denuo inuenturos eſſe. Fiebant autem hæc~~ Ludouico, Gallorum rege, ſub Iulio II. pontifice Italiam vaſtante.*

Rabi Moſes in Aphoriſmis particula 25. ſic ſcribit: In Sicilia accidit Eclipſis ſolis magna, & illo anno mulieres filios deformes ac bicipites peperere plurimos.

Quæritur hic, Vtrum bruta concipere poßint ab hominibus, vel etiam vicißim homines à brutis. Hoc autem fieri poſſe tribus affirmamus rationibus. Primo naturali appetitu. Secundo, prouocatione naturæ ex delectatione. Tertio, virtute attractiua matricis, quæ in brutis & hominibus ſimilis eſt. Exempla in prõptu ſunt.

An bruta ab hominib. poſſint cõcipere.

N 3 *Plu-*

assueta invidia non solum delineata erant verba ut noscitur, verum etiam detecta cum dura glutinata: Ego juxta meam diligentiam volui hec videre, valeti hodie nequoque legi –
Io. Fasanelli

49 Monstrous births from *De conceptu et generatione hominis* (1580).

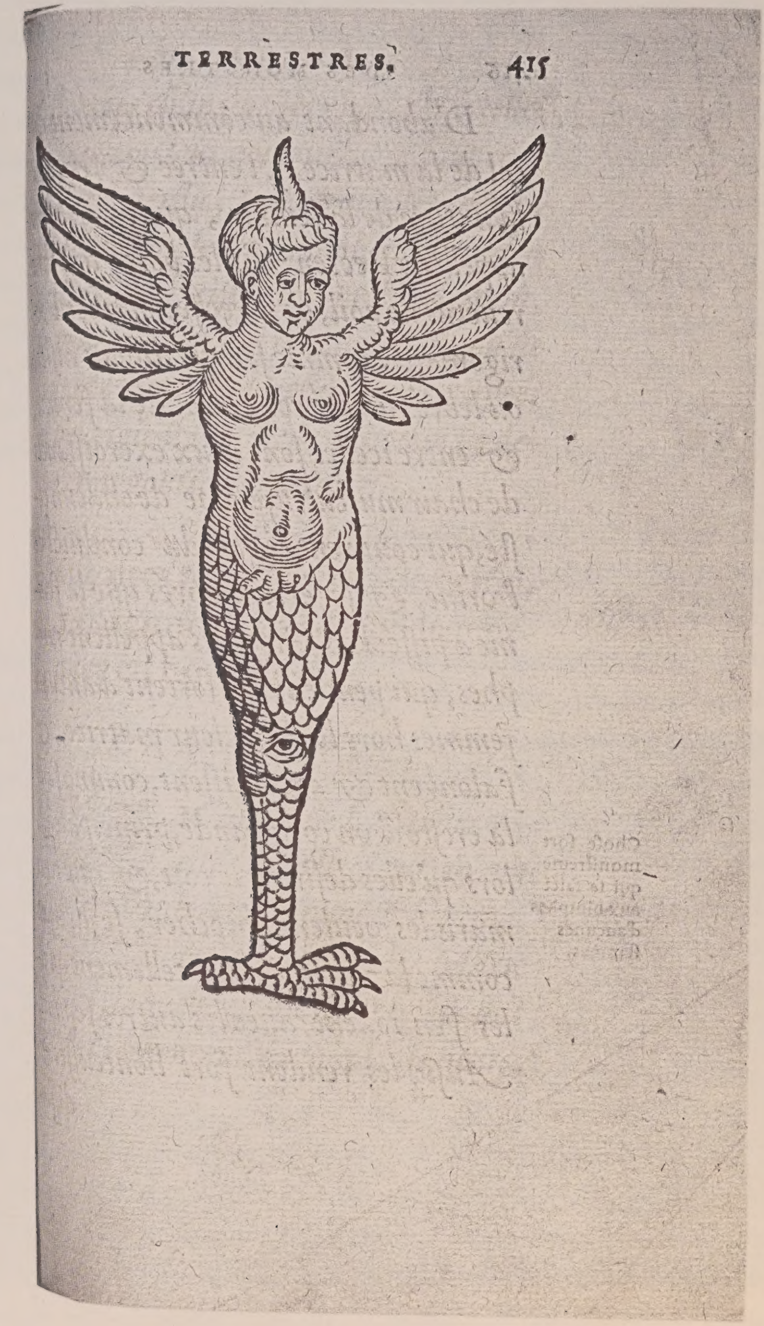
monstrosity is the intervention of the will of God.[357] In the third chapter of the fifth book, Rueff describes thirty-two cases of monstrous births with corresponding woodcut illustrations intended to show a range of examples of both congenital defects and mythical creatures.[358] The book takes a number of cases and illustrations from Obsequens (1552) and contemporary accounts of monstrous births.[359] It depicts and describes classical monsters like the 'elephant-headed boy' in the same place as widespread early-modern reports of monstrous births like the Monk Calf and the monsters of Krakow and Ravenna.[360] For its contemporary midwife readers, this early work on obstetrics combines practical lessons on every aspect of the pregnancy with moral instruction pertaining to the intricate meanings of monstrous births at that time.[361] In the history of teratology, *De conceptu et generatione hominis* is the first book to present a comprehensive coverage of monstrous births and their natural causes from the classical to the early modern period.[362]

50 Ambroise Paré (ca. 1510–1590). *Deux livres de chirurgie.* Paris: Andreas Wechel, 1573.

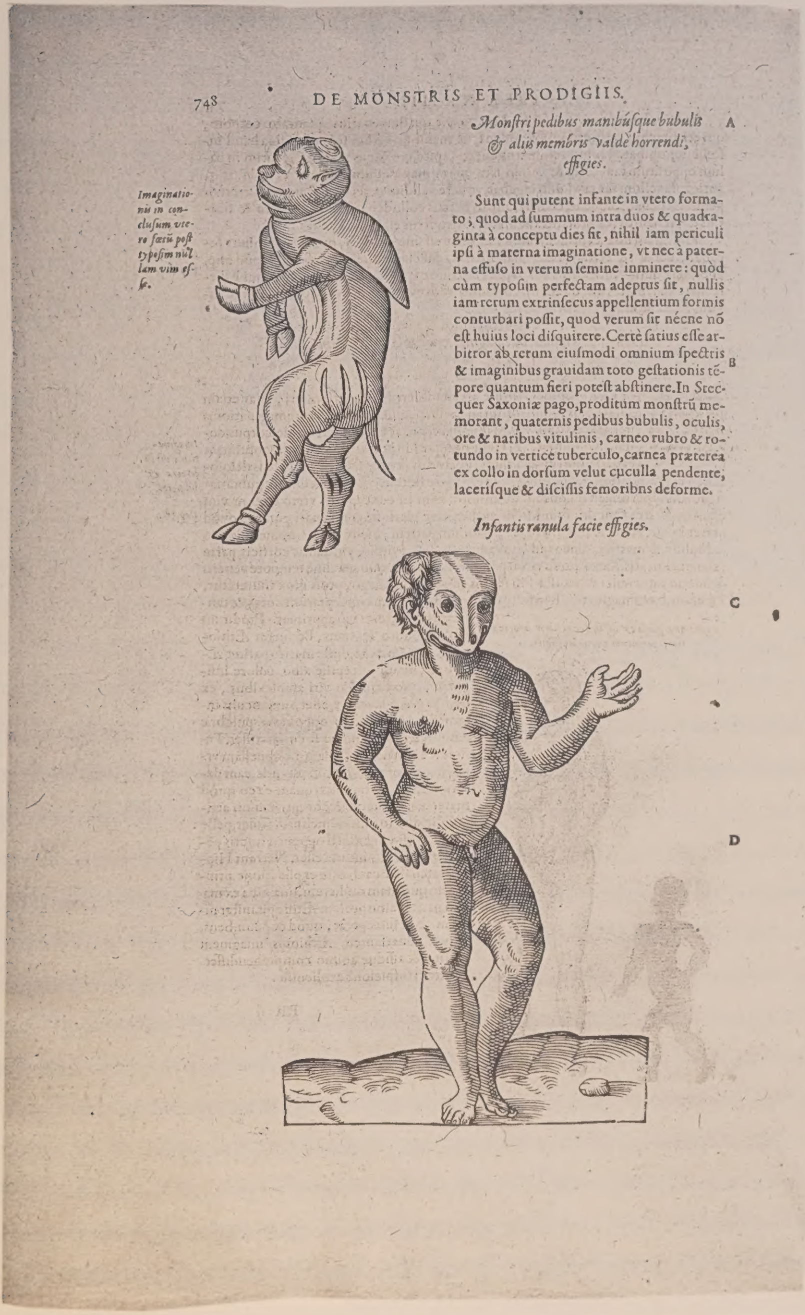
51 Ambroise Paré (ca. 1510–1590). *Opera.* Paris: Jacques Dupuys, 1582.

The French surgeon Ambroise Paré appealed to the 'power of imagination' to explain the appearance of a report in 1517 that a child in France had been born with the face of a frog.[363] The child in question became a monster because the mother, as Paré tells us, was holding a frog at the moment of conception.[364] This strange story is one of forty cases of monstrous births included in Paré's *Des monstres et prodiges*, a practical treatise on teratology which was originally published in 1573 as the second part of *Deux livres de chirurgie*.[365] The text was incorporated in Paré's *Oeuvres* in 1575 and later reprinted in several editions and translations of his collected works into Latin (1582), German (1601), and English (1634). Paré is often considered the founder of modern teratology because his investigations into the natural causes of monstrous births provided future medical scholars with a historical background to study severe congenital disorders.[366]

In general terms, Paré defines monsters as 'things that appear outside the course of nature.'[367] He lists thirteen causes connected to the origins of monsters in the first chapter of the book. Paré argues that some monsters have divine or evil origins while others are the result of discrepancies in the balance of the 'seeds' during conception.[368] The mother's imagination, her physical well-being, and illnesses or other issues affecting the womb may also produce monsters during the pregnancy.[369] The list is indicative of the contents of


TERRESTRES.
415

50 Ravenna monster from *Deux livres de chirurgie* (1573).



Monſtri pedibus manibúſque bubulis & aliis membris valdè horrendi, effigies. A

Imaginationis in conclusum vtero fœtũ poſt typoſim nullam vim eſſe.

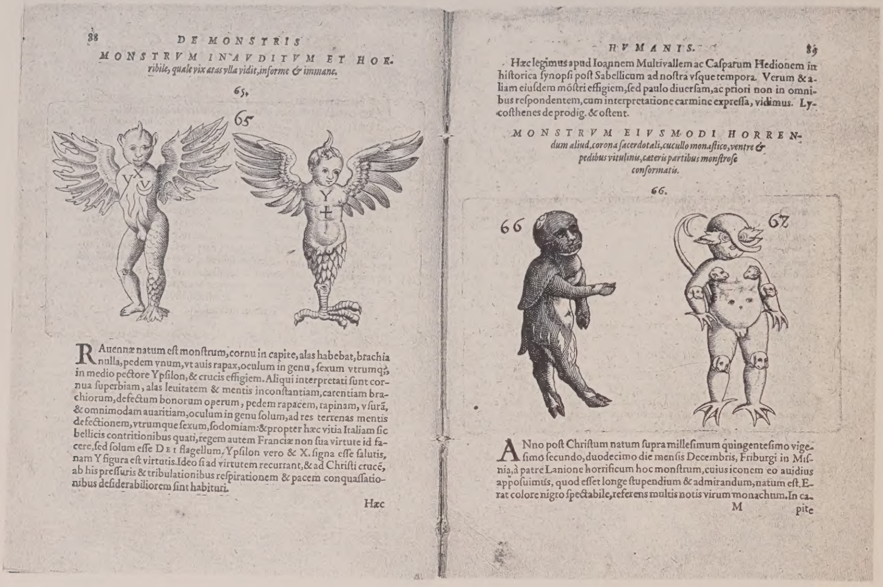
Sunt qui putent infante in vtero formato; quod ad ſummum intra duos & quadraginta à conceptu dies fit, nihil iam periculi ipſi à materna imaginatione, vt nec à paterna effuſo in vterum ſemine inminere: quòd cùm typoſim perfectam adeptus ſit, nullis iam rerum extrinſecus appellentium formis conturbari poſſit, quod verum ſit nécne nõ eſt huius loci diſquirere. Certè ſatius eſſe arbitror ab rerum eiuſmodi omnium ſpectris B & imaginibus grauidam toto geſtationis tēpore quantum fieri poteſt abſtinere. In *Stecquer* Saxoniæ pago, proditum monſtrũ memorant, quaternis pedibus bubulis, oculis, ore & naribus vitulinis, carneo rubro & rotundo in verticé tuberculo, carnea præterea ex collo in dorſum velut cucullа pendente, laceríſque & diſciſſis femoribns deforme.

Infantis ranula facie effigies.

C

D

51 Monstrous births from *Opera* (1582).



88 DE MONSTRIS

MONSTRVM INAVDITVM ET HORribile, quale vix ætas vlla vidit, informe & immane.

65.

Rauennæ natum eſt monſtrum, cornu in capite, alas habebat, brachia nulla, pedem vnum, vt auis rapax, oculum in genu, ſexum vtrumq;, in medio pectore Ypſilon, & crucis effigiem. Aliqui interpretati ſunt cornua ſuperbiam, alas leuitatem & mentis inconſtantiam, carentiam brachiorum, defectum bonorum operum, pedem rapacem, rapinam, vſurã, & omnimodam auaritiam, oculum in genu ſolum, ad res terrenas mentis defectionem, vtrumque ſexum, ſodomiam: & propter hæc vitia Italiam ſic bellicis contritionibus quati, regem autem Franciæ non ſua virtute id facere, ſed ſolum eſſe DEI flagellum, Ypſilon vero & X. ſigna eſſe ſalutis, nam Y figura eſt virtutis. Ideo ſi ad virtutem recurrant, & ad Chriſti crucẽ, ab his preſſuris & tribulationibus reſpirationem & pacem conquaſſationibus deſiderabiliorem ſint habituri.

Hæc

HVMANIS. 89

Hæc legimus apud Ioannem Multivallem ac Caſparum Hedionem in hiſtorica ſynopſi poſt Sabellicum ad noſtra vſque tempora. Verum & aliam eiuſdem mõſtri effigiem, ſed paulo diuerſam, ac priori non in omnibus reſpondentem, cum interpretatione carmine expreſſa, vidimus. Lycoſthenes de prodig. & oſtent.

MONSTRVM EIVSMODI HORRENdum aliud, corona ſacerdotali, cucullo monaſtico, ventre & pedibus vitulinis, cæteris partibus monſtroſe conformatis.

66.

Anno poſt Chriſtum natum ſupra milleſimum quingenteſimo vigeſimo ſecundo, duodecimo die menſis Decembris, Friburgi in Miſnia, à patre Lanione horrificum hoc monſtrum, cuius iconem eo auidius appoſuimus, quod eſſet longe ſtupendium & admirandum, natum eſt. Erat colore nigro ſpectabile, referens multis notis virum monachum. In ca-

M pite

52 Monstrous births from *Monstrorum historia memorabilis* (1609).

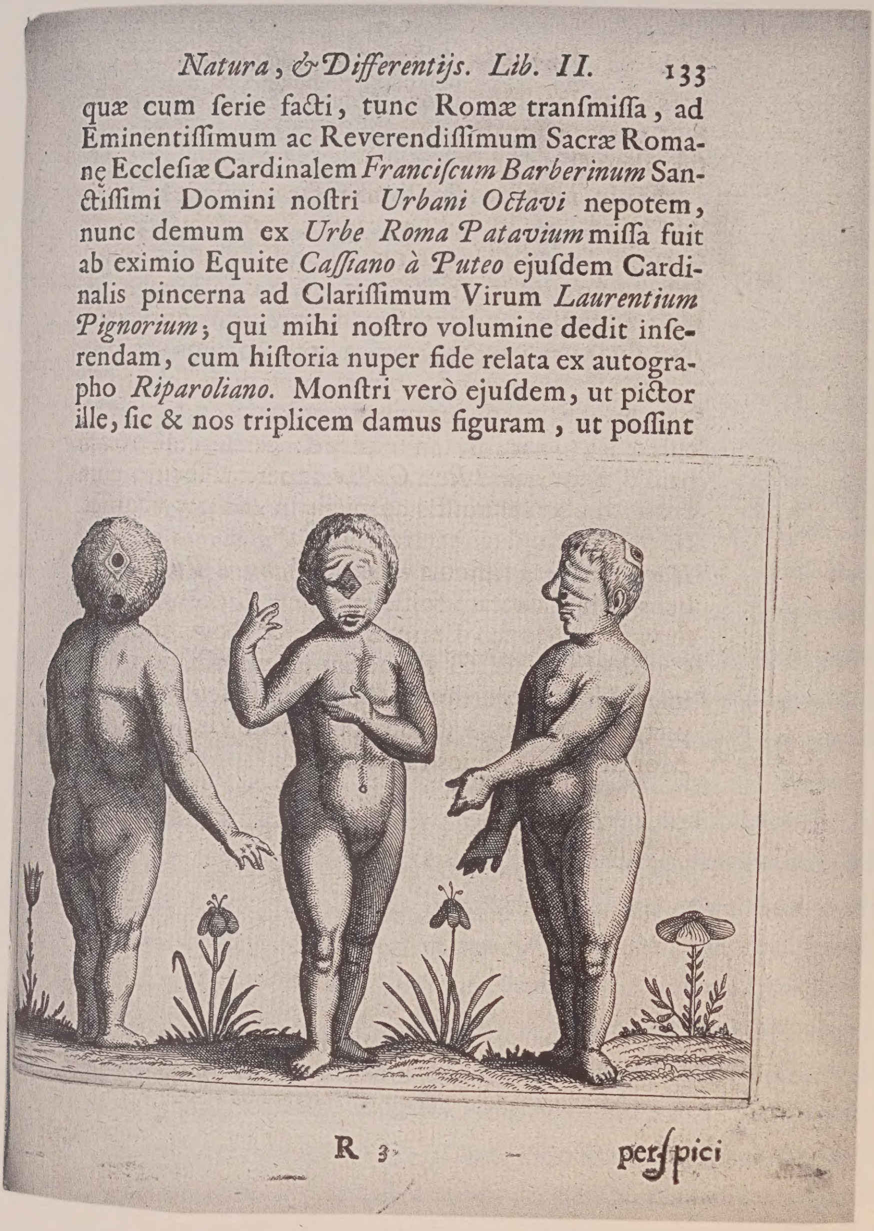
rest of the book because Paré pays more attention to the natural origins of monsters rather than focusing on their meanings as prodigies.[370] His descriptions of monstrous births in humans and animals, for instance, have a clear medical approach, whereas writings on monstrous animals in nature, celestial events, and exotic creatures follow the convention of wonder books.[371] The main sources for the book are, consequently, both medical and historical. Lycosthenes's *Prodigiorum ac ostentorum chronicon* (1557) and Boaistuau's *Histoires prodigieuses* (1560) supply several of the historical accounts of monstrous births and mythical monsters. As for the medical sources, Paré uses Rueff's *De conceptu et generatione hominis* (1554) and Weyer's *Medicarum observationum rararum liber* (1567). Surgeons and students of medicine also found in this book an accessible, entertaining yet informative collection of monstrous stories.[372] Because of these qualities, *Des monstres et prodiges* is one of the most significant books on monsters ever published.[373] Its repertoire of monstrous births and varied interpretations allowed Renaissance readers to experience a transitional moment in history when monsters were the subject of wonder books, popular literature, travel accounts and, simultaneously, a matter of inquiry in books of science and medicine.[374]

52 Johann Georg Schenck (1503–1620). ***Monstrorum historia memorabilis.*** **Frankfurt: Matthias Becker, 1609.**

Monstrorum historia memorabilis is one of the first contributions to the history of teratology in Europe.[375] The German physician Johann Georg Schenck collaborated with the successful engraver and publisher Theodor de Bry to issue a treatise solely devoted to monstrous births with all the elements of a 'best-seller.' Divided into two parts, the first deals with cases of birth defects in humans and the second covers deformities in animals including hybrid creatures. The two most notable qualities of the book are the brevity of the descriptions and, of course, the use of engravings by de Bry. In the span of 135 pages, the treatise reports the date and place of occurrence of close to one hundred examples of physical abnormalities along with fifty-five engravings, most of which have two figures per plate. Schenck excludes the legendary monsters and prodigies of wonder books to concentrate on monstrous births from the sixteenth century.[376] The popular accounts of the monsters of Krakow and Ravenna complement the selection of malformations, stories of conjoined twins, hermaphrodites, and physical disabilities. Lycosthenes is the central source but Schenck also references cases from contemporary authorities like Rueff (1554), Fincel (1556), Paré (1573), among others. Schenck's editorial choices suggest that he knew well that the popularity of this publication depended on reaching different audiences such as medical scholars, students, and amateur readers.[377]

53 Fortunio Liceti (1577–1657). ***De monstris.*** **Amsterdam: Andreas Frisius, 1665.**
54 Fortunio Liceti (1577–1657). ***De monstris.*** **Padua: Paolo Frambotti, 1668.**

The Italian physician and philosopher Fortunio Liceti initially conceived *De monstrorum causis natura et differentiis* as a reference source for medical scholars and not as a practical manual for physicians.[378] The first edition was therefore published in 1616 with no illustrations. But the growing market for studies on monsters during the seventeenth century finally steered the publication towards the popular genre of books on teratology aimed at wider audiences. Not surprisingly, the second edition of 1634 came out as a richly illustrated volume with fifty-eight engravings containing more than one hundred individual depictions of monsters. The third and fourth illustrated editions were published in 1665 and 1668 comprising additional content.[379] Most of the illustrations derived from contemporary broadsides on news of monstrous births and from the works of Lycos-



Natura, & Differentijs. Lib. II. 133

quæ cum ſerie facti, tunc Romæ tranſmiſſa, ad Eminentiſſimum ac Reverendiſſimum Sacræ Romanę Eccleſiæ Cardinalem *Franciſcum Barberinum* Sanctiſſimi Domini noſtri *Urbani Octavi* nepotem, nunc demum ex *Urbe Roma Patavium* miſſa fuit ab eximio Equite *Caſſiano à Puteo* ejuſdem Cardinalis pincerna ad Clariſſimum Virum *Laurentium Pignorium*; qui mihi noſtro volumine dedit inſerendam, cum hiſtoria nuper fide relata ex autographo *Riparoliano.* Monſtri verò ejuſdem, ut pictor ille, ſic & nos triplicem damus figuram, ut poſſint

R 3 perſpici

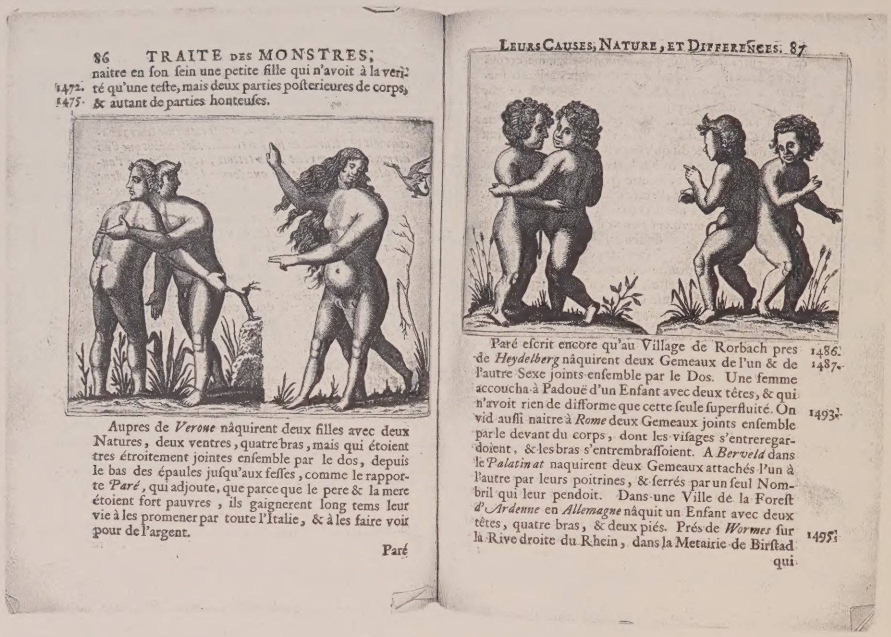
53 Octavia Riparolia from *De monstris* (1665).

thenes (1557) and Paré (1573).[380] The inclusion of illustrations not only made the book more attractive to potential readers but it also elevated the alledged authenticity of the reports.[381]

Liceti's approach coincides with the methods of natural philosophers and medical scholars like Aldrovandi and Paré. In *De monstrorum*, Liceti offers a systematic classification of monstrosity grounded upon classical, medieval, and early-modern sources which he interprets according to the recent scientific and medical discoveries of the period.[382] The book analyzes in two sections the causes, origins, and individual qualities of cases of general and human monstrosities.[383] Liceti deviates from the genre of wonder books inasmuch as he discards the tradition of monsters as prodigies or as 'errors' of nature.[384] On the monster of Ravenna, for example, Liceti prefaces his descriptions by arguing that such monsters are not messengers of future events nor signs of divine wrath.[385] Instead, he defines them as natural creations that incite wonder and horror when in the presence of their hideous bodies.[386] Liceti also considers monsters to be 'jokes of nature' or physical expressions of nature's ingenious creations from imperfect or incomplete matter.[387] The book also incorporates some recent monstrous births reported after the first edition. Liceti recounts in detail the case of Octavia Riparolia, a young girl born in 1624 with one eye and a deformed head, which the book depicts in two engravings based on an original painting of the girl in the collection of the Cardinal Francesco Barberini (1597–1679).[388] Every monster in this treatise, regardless of their nature, is studied, classified, and explained through logic and science.[389] Liceti's *De monstrorum* was a turning point in the history of the teratology because the author looked beyond the conventional theories and knowledge of the time to methodically analyze the nature of monsters.[390]

55 **Jan Palfyn (1650–1730).** ***Description anatomique des parties de la femme, qui servent à la generation: avec un traité des monstres.***
Leiden: Bastiaan Schouten, 1708.

Accounts of the monster of Ravenna circulated for almost two centuries by the time the Flemish anatomist and surgeon Jan Palfyn published a French translation of Liceti's *De monstrorum*. First reported in Bologna in 1512, the monster earned its name from its association with the outcome of the Battle of Ravenna in the same year.[391] News of the monster quickly travelled through Europe in broadsides, pamphlets, letters, and diaries, as well as in most books of wonders and works of teratology of the period.[392] The monster was



86 TRAITE DES MONSTRES;
naitre en ſon ſein une petite fille qui n'avoit à la veri-
1472. té qu'une teſte, mais deux parties poſterieures de corps,
1475. & autant de parties honteuſes.

Aupres de *Verone* nâquirent deux filles avec deux Natures, deux ventres, quatre bras, mais qui étoient tres étroitement jointes enſemble par le dos, depuis le bas des épaules juſqu'aux feſſes, comme le rapporte *Paré*, qui adjoute, que parce que le pere & la mere étoient fort pauvres, ils gaignerent long tems leur vie à les promener par toute l'Italie, & à les faire voir pour de l'argent.

Paré

LEURS CAUSES, NATURE, ET DIFFERENCES. 87

Paré eſcrit encore qu'au Village de Rorbach pres 1486.
de *Heydelberg* nâquirent deux Gemeaux de l'un & de 1487.
l'autre Sexe joints enſemble par le Dos. Une femme
accoucha à Padouë d'un Enfant avec deux têtes, & qui
n'avoit rien de difforme que cette ſeule ſuperfluité. On 1493.
vid auſſi naitre à *Rome* deux Gemeaux joints enſemble
par le devant du corps, dont les viſages s'entreregar-
doient, & les bras s'entrembraſſoient. A *Berveld* dans
le *Palatinat* naquirent deux Gemeaux attachés l'un à
l'autre par leurs poitrines, & ſerrés par un ſeul Nom-
bril qui leur pendoit. Dans une Ville de la Foreſt
d'Ardenne en *Allemagne* nâquit un Enfant avec deux
têtes, quatre bras, & deux piés. Prés de *Wormes* ſur
la Rive droite du Rhein, dans la Metairie de Birſtad 1495.
qui

55 Monstrous births from *Un traité des monstres* (1708).

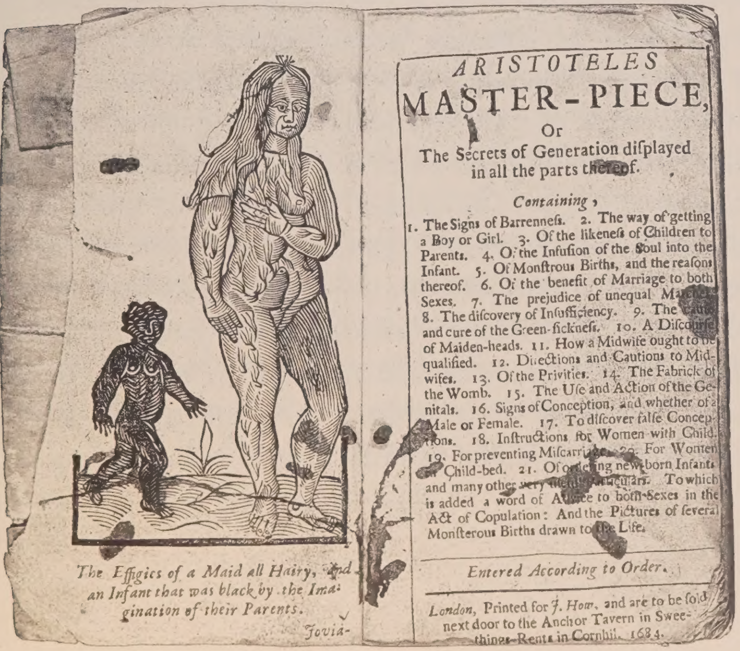
frequently featured as a prodigy, even in books that disagreed with this interpretation, and the incongruent elements of its body were often seen, one by one, as signs of religious and moral weakness.[393] From the horned head to the birthmarks on the chest with the letters YXV, wings of a bat or bird, and bird or reptile legs with eyes, the complex iconography of the monster drew the attention of authors and readers alike to the point of becoming the most documented and notorious monstrous birth of the early modern period.[394] But by the time the story resurfaced in Palfyn's treatise of 1708, the monster of Ravenna was no more than a legend with little consequence to the realities of the eighteenth century.[395]

Liceti's *Traité des monstres* was published together with Palfyn's treatise on the anatomy of the female reproductive organs and a text on monstrous births. The new edition reused the original engravings of earlier volumes but the text had been 'enriched' by the translator.[396] Palfyn's *Description anatomique* accepts teratological ideas of the female role in the generation of monsters inasmuch as his book pathologizes the female reproductive system as a source of monstrosity.[397] Palfyn indicates, for example, that 'these organs are the cause of most of our ills' and also claims that 'almost all of the world's disorders, past and present, can be traced to them.'[398] The third portion of the text deals with Palfyn's own reports on the anatomy of two cases of conjoined twins which he had previously dissected and described in 1703.[399] Palfyn associated the latest developments on anatomy and obstetrics with the discourse of teratology to advance, once again, corrosive notions of female sexuality that would persist even through the Enlightenment.[400]

56 ***Aristoteles Master-Piece, or The Secrets of Generation Displayed in all the Parts.* London: Printed for J. How, 1684.**

57 ***Aristotle's Compleat and Experience'd Midwife.* London: Printed and sold by the booksellers, ca. 1750.**

Far from the Aristotelian theories on reproduction, *Aristoteles Master-Piece* was first published in London in 1684.[401] The publication dominated the market of popular sex and midwifery manuals in the eighteenth century with nearly one hundred editions



The Effigies of a Maid all Hairy, and
an Infant that was black by the Ima-
gination of their Parents.

Jovia-

ARISTOTELES
MASTER-PIECE,
Or
The Secrets of Generation diſplayed
in all the parts thereof.

Containing,
1. The Signs of Barrenneſs. 2. The way of getting
a Boy or Girl. 3. Of the likeneſs of Children to
Parents. 4. Of the Infuſion of the Soul into the
Infant. 5. Of Monſtrous Births, and the reaſons
thereof. 6. Of the benefit of Marriage to both
Sexes. 7. The prejudice of unequal [illegible]
8. The diſcovery of Inſufficiency. 9. The [illegible]
and cure of the Green-ſickneſs. 10. A Diſcourſe
of Maiden-heads. 11. How a Midwife ought to be
qualified. 12. Directions and Cautions to Mid-
wifes. 13. Of the Privities. 14. The Fabrick of
the Womb. 15. The Uſe and Action of the Ge-
nitals. 16. Signs of Conception, and whether of a
Male or Female. 17. To diſcover falſe Concep-
tions. 18. Inſtructions for Women with Child.
19. For preventing Miſcarriage. 20. For Women
in Child-bed. 21. Of ordering new-born Infants
and many other very [illegible] Particulars. To which
is added a word of Advice to both Sexes in the
Act of Copulation: And the Pictures of ſeveral
Monſterous Births drawn to the Life.

Entered According to Order.

London, Printed for *J. How*, and are to be ſold
next door to the Anchor Tavern in Swee-
things-Rents in Cornhil. 1684.

56 Frontispiece from *Aristoteles Master-Piece* (1684).

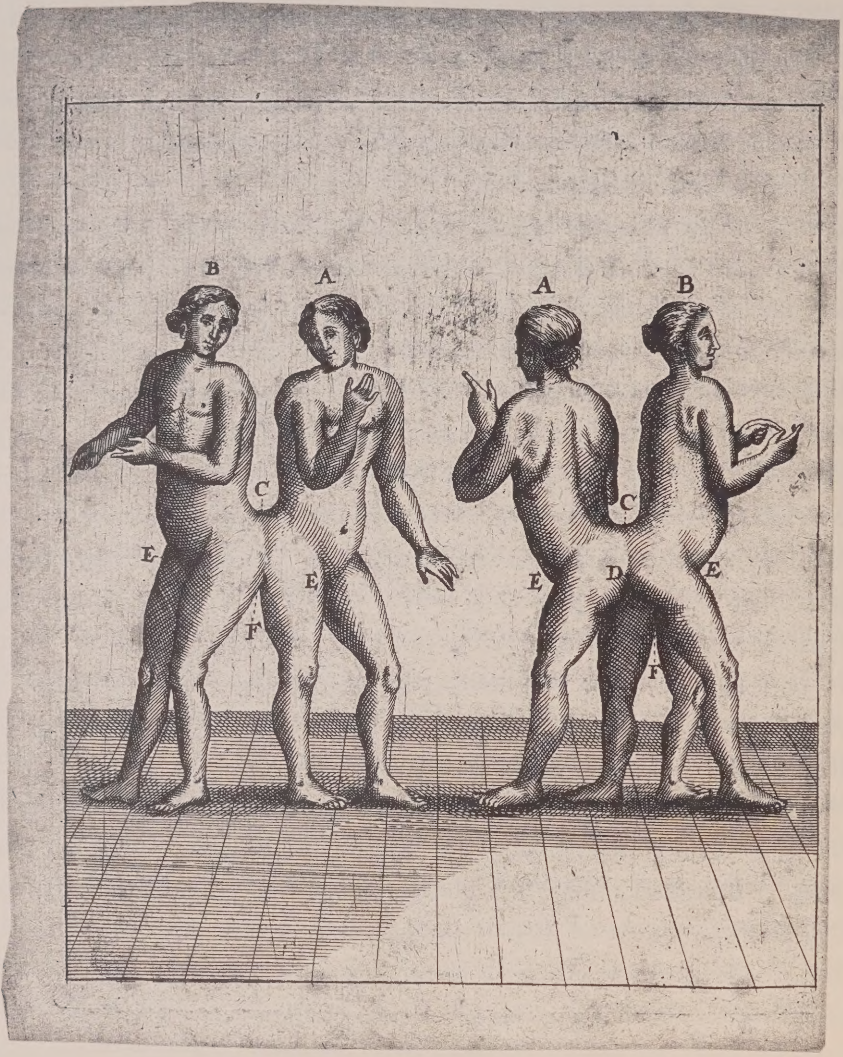
issued before 1800.[402] In the introduction to the first edition, the book offers to 'unravel the mysteries of generation' in the course of thirty-seven chapters. While the promise of revealing secret knowledge captured the imagination of readers, printers and publishers in England and America also profited from the lasting popularity of this manual devoted to the subjects of sex, reproduction, and childbirth.[403] *Aristoteles Master-Piece* remained in circulation as a separate title, or published with other pseudo-Aristotelian works until the twentieth century, when it essentially became a source for medical historians concerned with the sexual lore of the eighteenth and nineteenth centuries.[404]

Aristoteles Master-Piece survives in at least three distinct versions published in the editions of 1684, 1697, and 1702.[405] Each version uncovers the most common causes of monstrous births tied to ideas of sex and reproduction in the fifth chapter. 'Now a monstrous habit or shape of body is contracted divers ways,' the text explains, 'as from fear, sudden frights, extraordinary passion, the influence of the stars, too much or too little seed, the mother's strange imagination, and divers phantasms.'[406] What follows are reports of monstrous births along with advice on how and when to avoid producing 'preposterous forms' at the time of conception. The well-known accounts of the monster of Ravenna and the Monk Calf are present, as are the cases of a hairy woman and a black baby born as 'monsters' owing to the imagination of their parents. Most of the content of the book derives from earlier midwifery manuals, mainly Lemnius's *The Secret Miracles of Nature* (1658) and Rueff's *The Expert Midwife* (1637).[407] The English edition of Paré's *Works* (1634) is the source for the illustrations that appear at the end of the treatise with brief captions in the earlier versions, while the latest contains the same set of illustrations within the text.[408] The enduring popularity of *Aristoteles Master-Piece* is evident in the various versions and abundance of editions available to readers eager to learn the 'secrets of generation.' The coherent approach to the subject and the presence of illustrations of monstrous births also contributed to making the book the most popular guide on sex, reproduction, and monstrosity in the eighteenth century.[409]

58 Georg Christian Werther. ***Disputatio medica de monstro Hungarico.***
Leipzig: Christian Goez, 1707.

59 Jacopo Pellegrino Nuvoletti. ***Lettera scritta all'illustrissimo Monsignore Ridolfo de' Contidi Montevecchio, sopra d' un parto monstruoso.***
Fano: Benardino Vigolini, 1714.

Reports of children physically joined at birth were featured in every substantial book on monsters issued before the end of the eighteenth century. In books of teratology, more specifically, the most predominant cases of monstrous births were the 'double monsters' or conjoined twins.[410] Physicians often described and classified cases according to their anatomy.[411] Two pamphlets issued in the early years of the eighteenth century expose two cases of monstrous births in Hungary and Italy as popular stories and medical reports at the same time. The first tells the story of the twin sisters Ilona and Judith Gófitz who were born at Szöny on 19 October 1701 and who lived without being separated until 1723. The second refers to the case of the twin boys Francesco and Domenico, who were born on 1 August 1713 in the Marche region in Italy and who died within four months of their birth. The physicians Georg Christian Werther and Jacopo Pellegrino Nuvoletti wrote the corresponding accounts in two illustrated pamphlets that identify the births as monstrous, provide anatomical descriptions for each case, and comment on the health and the possibility of surgery to separate the twins. Werther's account of the Hungarian Sisters, as they came to be known, relates a life of health complications until their death at the age of twenty-two. In the case of the Italian boys, Nuvoletti recounts the observations of a local physician who had delivered the twins and later examined them at the time of their death. Like other early-modern reports on conjoined twins, the two stories resort to sensational elements by relating the unfortunate experiences of the conjoined twins participating in shows or displays of curiosities. But the reports also discuss the medical causes and moral implications of monstrosity for individuals and society at large. In this sense, the approach to the medical aspects of the cases foresees some of the concerns of modern teratology in the nineteenth century.[412]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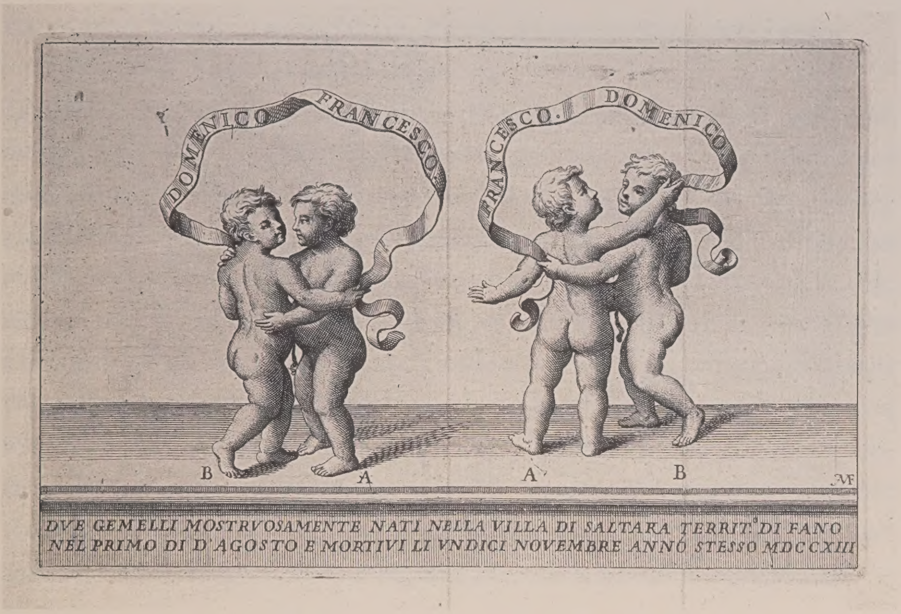
58 Ilona and Judith Gófitz from *Disputatio medica de monstro Hungarico* (1707).


DOMENICO
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B
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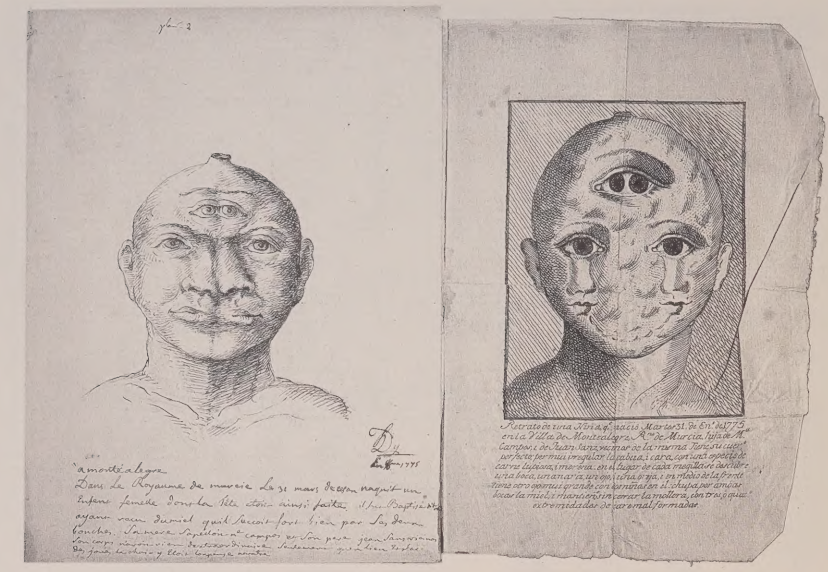
DVE GEMELLI MOSTRVOSAMENTE NATI NELLA VILLA DI SALTARA TERRIT.° DI FANO
NEL PRIMO DI D'AGOSTO E MORTIVI LI VNDICI NOVEMBRE ANNO STESSO MDCCXIII

59 Francesco and Domenico from *Lettera scritta all'illustrissimo Monsignore Ridolfo* (1714).

60 Jean-Hippolyte Danyzy (b. 1748). Notebook of Observations on Cases of Teratology. Montpellier & Privas, 1780–1827.

French physicians and medical practitioners submitted more than forty manuscript reports of congenital anomalies to the *Société Royale de Médicine* and other medical institutions between the years of 1780 and 1815.[413] The surviving records of these reports contain anatomical descriptions, illustrations, notarized statements, and general information on cases of malformations which trace their provenance back to all sorts of private and public institutions or individuals throughout France.[414] The astronomer, mathematician, and natural philosopher Jean-Hippolyte Danyzy kept a similar record of his personal observations on malformations in plants, animals, and humans during the same period. The manuscript journal comprises over forty years of notes, illustrations, anatomical descriptions, and general comments on a variety of cases taken from correspondence with peers and from first-hand accounts. One particular entry dates from Danyzy's travels to Aragon where he saw an engraving depicting a girl born in the region of Murcia on 31 January 1775.[415] A local surgeon who had studied the girl's severe facial deformities

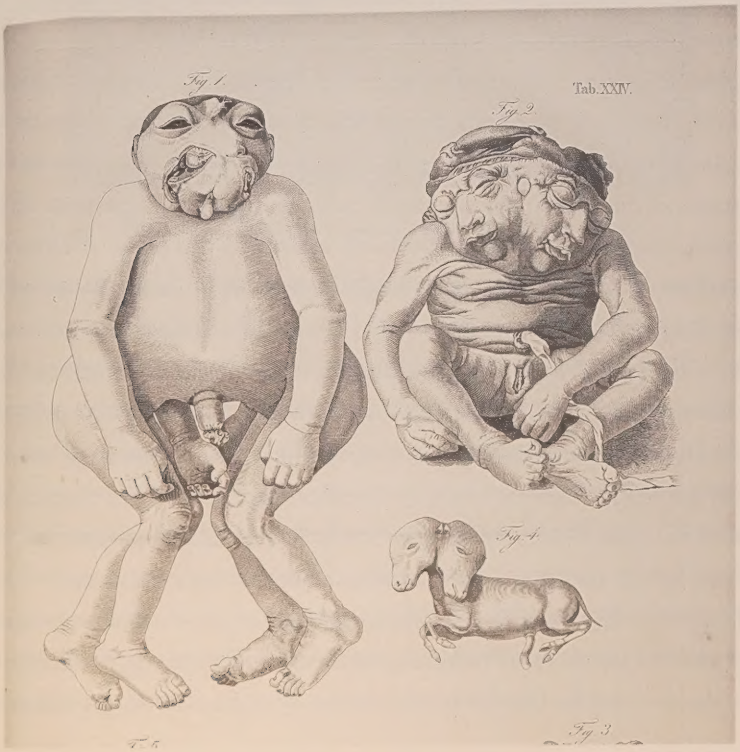

pl. 2
Dy
1775
a montéalegre
Dans Le Royaume de murcie Le 31 mars de cet an naquit un
Enfant femelle dont la tête etoit ainsi faite. il fut Baptisé et
ayant vecu dernier quil Succoit fort bien par ses deux
bouches. Sa mere s'apelloit m. campos et son pere jean Sanz vivans
Retrato de una Niña, q.e nació Martes 31. de En.º de 1775
en la Villa de Montealegre, R.no de Murcia, hija de M.a
Campos, i de Juan Sanz, vecinos de la misma. Tiene su cuer.o
perfecto; pero mui irregular la cabeza, i cara, con una especie de
carne lupiosa, i morena: en el lugar de cada mejilla se descubre
una boca, una nariz, un ojo, i una oreja, i en medio de la frente
tiene otro ojo mui grande con dos niñas en el: chupa por ambas
bocas la miel, i mantiene sin cerrar la mollera, con tres, o quat.o
extremidades de carne mal formadas.

60 Ink drawings of monstrous birth from *Notebook of Observations on Cases of Teratology* (1780-1827).

provided him with enough information to create a new and more accurate illustration. Two ink drawings appear next to each other in the journal: one with description of the case in Spanish and the other with the French translation underneath the new image based on the surgeon's report. Danyzy's account is characteristic of the period since he is not only interested in describing the girl in medical terms but he also asks questions that indicate moral and religious concerns within the context of the study of birth defects.[416] He asks, for example, whether the girl has one or two souls given that her face shows two sets of eyes, noses, and mouths. Even though this journal was possibly kept for private study, its contents make references to collaboration, first-hand observations, and even a mention of a lecture delivered on the subject of monsters. Apart from presenting evidence on the 'naturalization' and 'medicalization' of monsters within the framework of teratology,[417] these reports also speak to some of the scientific and ethical concerns at the heart of the physical investigations of monsters by physicians, public officials, and natural philosophers during the eighteenth and nineteenth centuries.[418]

61 Adolph Wilhelm Otto (1786–1845). *Monstrorum sexcentorum descriptio anatomica.* Breslau: Ferdinand Hirt, 1841.

The field of teratology owes a great deal to the scientific investigations of nineteenth-century physicians and natural philosophers into the nature of human birth defects and malformations. The German anatomist Johann Friedrich Meckel (1781–1833) is recognized as the first medical scholar to unify the science of teratology and embryology in his *Handbuch der pathologischen Anatomie* (1812–1818), a book that laid the foundation for modern scientific teratology.[419] The French zoologist Isidore Geoffroy Saint-Hilaire (1805–1861) also advanced the systematic study of teratology in his *Traité de tératologie* (1832–1836) in which he introduced the term 'teratology' to define the new science along with other terms for particular abnormalities.[420] Together, Meckel and Saint-Hilaire envisioned the profound transformations in the study of monstrous births from esoteric theories like the maternal imagination to new principles and practices of embryology and anatomy within the science of teratology.[421]



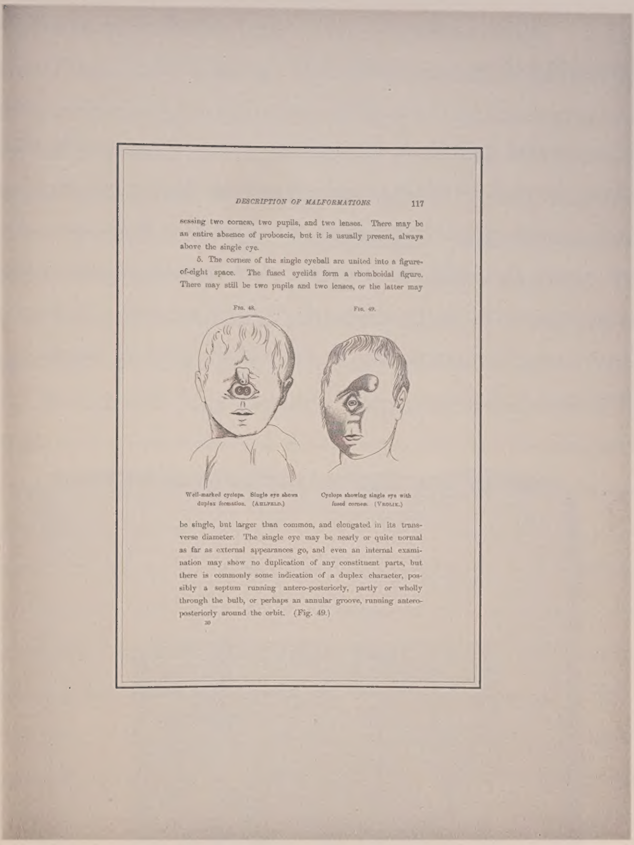
61 Engravings from *Monstrorum sexcentorum descriptio anatomica* (1841).

Adolph Wilhelm Otto was the first to conduct comprehensive pathological studies on the causes, development, description, and classification of congenital malformations.[422] *Monstrorum sexcentorum descriptio anatomica*, published in 1841, is one of the earliest examples of pathological anatomy of humans and animals, some of which are based on actual dissection of specimens.[423] The large volume describes six hundred specimens from the anatomical museum at Breslau and contains thirty plates of engravings with 146 individual illustrations of the external and internal anatomy of the cases.[424] The illustrations and the brief descriptions in Latin provided medical scholars, scientists, and natural historians with useful references to particular cases of malformations. In a letter dated 31 December 1864, for instance, Charles Darwin (1809–1882) refers to Otto's treatise as a 'great work on monsters' and even mentions five cases of malformations in the context of his own studies on variation.[425] Over the course of the nineteenth century, the book became a valuable source for the study of pathological anatomy and one of the greatest contributions to the rising science of teratology.[426]

62 Barton Cooke Hirst (1861–1935) and George A. Piersol (1881–1966). *Human Monstrosities*. Philadelphia: Lea Bros., 1891–1893.

Human Monstrosities is the first book of teratology to contain photographic illustrations as well as the most extensive book on the subject to be published in the nineteenth century. The book is organized as a reference source to assist obstetricians and general practitioners in the identification, classification, and possible treatment of cases of malformations in humans. Based on the classification of Saint-Hilaire, the four volumes make available—for the first time in English—a medical classification of 'human monsters' and provide references to the works of earlier French and German anatomists and embryologists.[427] The physicians and professors Barton Cooke Hirst and George A. Pierson introduce an extensive classification, production, and description of malformations, in addition to examples of 'monstrosities' which they define as the 'most radical departures from normal development by the offspring of man.'[428] The authors make no reference in the book to maternal imagination or similar obscure causes of monstrosity while focusing their attention on the classification of fetal malformations.[429]

The editor of the journal *The Medical News* published a favourable review of the book in 1891 in which he praises it as a 'beautiful example of the art of printing.'[430] He also thought, however, that the book has failed to address the theory of maternal imagination as a source



DESCRIPTION OF MALFORMATIONS. 117

sessing two corneæ, two pupils, and two lenses. There may be an entire absence of proboscis, but it is usually present, always above the single eye.

5. The corneæ of the single eyeball are united into a figure-of-eight space. The fused eyelids form a rhomboidal figure. There may still be two pupils and two lenses, or the latter may

Fig. 48.

Well-marked cyclops. Single eye shows duplex formation. (Ahlfeld.)

Fig. 49.

Cyclops showing single eye with fused corneæ. (Vrolik.)

be single, but larger than common, and elongated in its transverse diameter. The single eye may be nearly or quite normal as far as external appearances go, and even an internal examination may show no duplication of any constituent parts, but there is commonly some indication of a duplex character, possibly a septum running antero-posteriorly, partly or wholly through the bulb, or perhaps an annular groove, running antero-posteriorly around the orbit. (Fig. 49.)

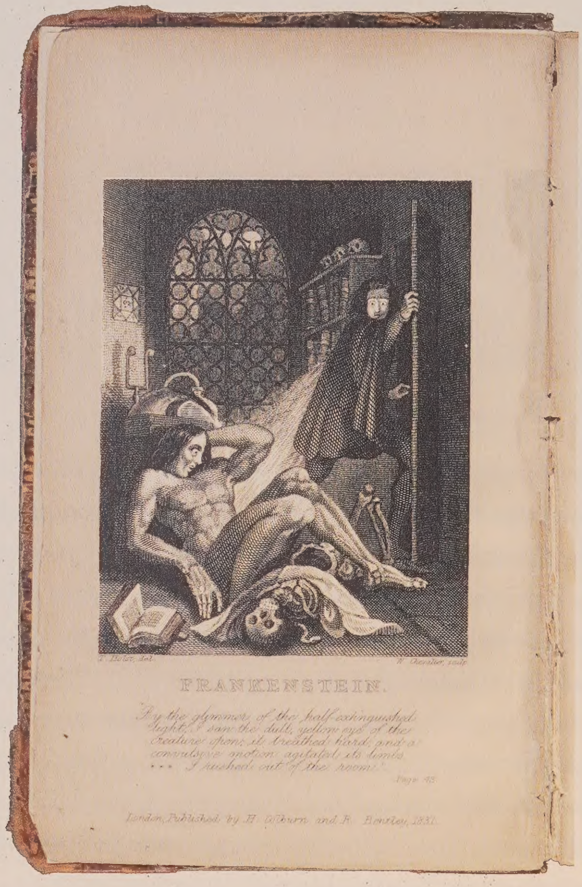
30

62 Illustration from *Human Monstrosities* (1891-1893).

of monstrosity, specifically when he argues that 'there is a vast body of evidence that strongly goes to prove the operation of this factor.'[431] The book review reflects the complexities associated the study of monsters and monstrosity as it came face-to-face with nineteenth-century science. Even though this period saw the development of teratology as a separate science, the medical concepts of the monster and monstrous in humans and animals changed constantly in the midst of debates among anatomists, embryologists, pathologists, and medical experts undertaking methodical studies of monstrous bodies.[432] Despite all the ongoing changes, new forms of scientific knowledge did not entirely replace the traditional emblematic meanings of monsters and their bodies. Instead, human monstrosity became a subject of scientific inquiry while it also existed as a commodity to be exploited by the popular culture of freak shows and literary stories of the nineteenth century.

Part V:
On Monstrous Stories

Mary Shelley (1797–1851) and Bram Stoker (1847–1912) are united by their writings on the subjects of monsters. Each of these authors crafted distinct visions of monstrosity in their own novels, inspiring the imagination of readers over the course of two centuries. Together, their novels also hold the answers to which writers, artists, filmmakers, and other creators have turned in their quests to the lands of monsters. Both stories have been transformed into new representations of monstrosity which are deeply ingrained in our cultural memory even to this day.



T. Holst, del.   W. Chevalier, sculp.

FRANKENSTEIN.

"By the glimmer of the half-extinguished
light, I saw the dull, yellow eye of the
creature open; it breathed hard, and a
convulsive motion agitated its limbs
. . . I rushed out of the room."

Page 43.

London, Published by H. Colburn and R. Bentley, 1831.

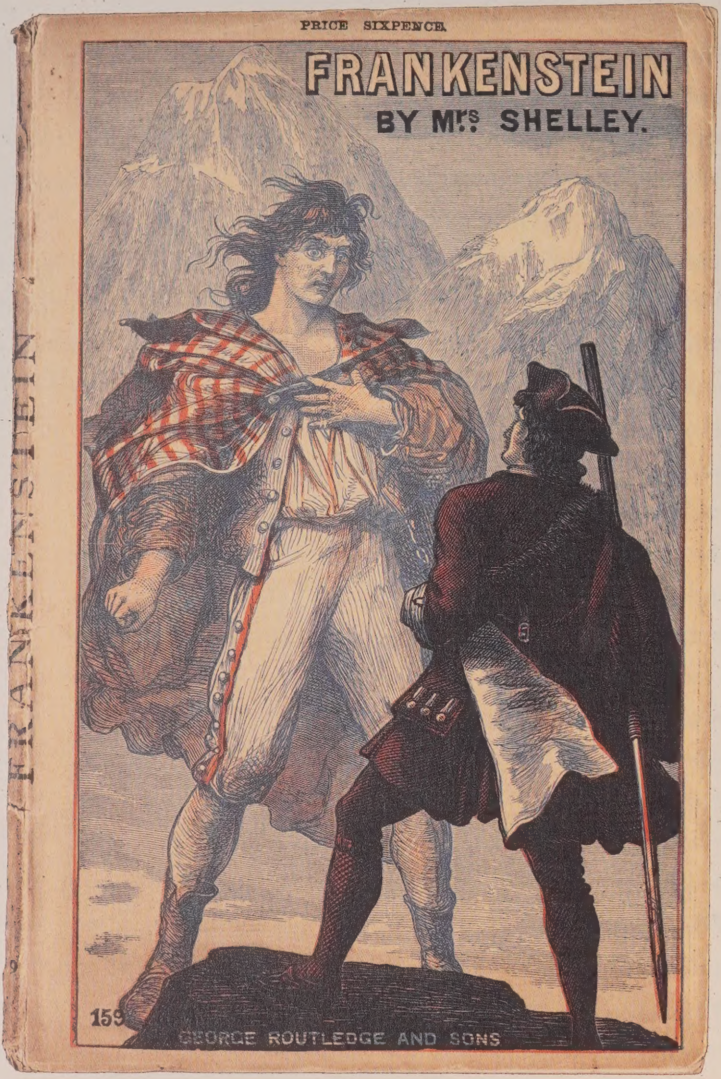
63 Fronticepiece from *Frankenstein* (1831).

63 Mary Wollstonecraft Shelley (1797–1851). *Frankenstein; or, the Modern Prometheus.* London: H. Colburn and R. Bentley, 1831.

Mary Wollstonecraft Shelley gave life to one of the two most famous monsters of the last two centuries in her renowned novel *Frankenstein; or, the Modern Prometheus.* Since the conception of the nameless monster in the first edition of 1818, Shelley's Gothic and Romantic narrative has been taken apart and put together again in countless new stories told through every imaginable form of art, literature, and popular culture. Between the appearance of the first edition and the publication of Shelley's revised edition in 1831, the story saw adaptation as a popular play in 1823 and was reissued in two separate editions in 1823 and 1826. It was also during this period that the initial reception of the book—the lack of sales of the 500 copies of the first edition and early unfavourable reviews—failed to reflect the immense success of a novel that would go on to transform representations of monstrosity in the literature and culture of the West.[433]

The first revised edition of *Frankenstein* was published on 31 October 1831 as part of the 'Standard Novels' series in a run of just over four thousand copies.[434] In the introduction to the volume, Shelley reveals some aspects of the origin of the story for the first time. She mentions, for example, the theory of 'galvanism' as one of the inspirations behind the science of reviving the composite body of the monster through electricity.[435] She also refers to the novel as her 'hideous progeny,' a statement which has led readers to pay attention to the text's autobiographical references along with its literary and scientific sources.[436] In light of Shelley's statements, the novel may be read as much as a reflection of the personal woes and anxieties of the author caused by her experience of motherhood, as a tale of the meaning of life and death, and, among other interpretations, as a warning against the dangers of science and technology.[437] The 1831 edition holds a prominent place in the publishing history of *Frankenstein* because the introduction and extensive revisions expose the complex relationship between the author and her the famous book.[438] This edition also serves as a testament to Shelley's own views of the legacy of her novel amid the literary and cultural realities of the nineteenth century.[439]

The revised edition is also significant because it is the first to depict the figure of the monster within the framework of the novel.[440] The frontispiece, illustrated by Theodor Von Holst (1810–1844) and engraved by William Chevalier (1804–1866), shows the moment when the creature comes to life as Victor Frankenstein exits the room in horror at the sight of his creation. In Holst's frontispiece, together with the cover for


PRICE SIXPENCE.
FRANKENSTEIN
BY Mrs SHELLEY.
159
GEORGE ROUTLEDGE AND SONS
FRANKENSTEIN

63 Yellowback edition of *Frankenstein* (1882).

G. Routledge and Sons yellowback edition of 1882 and the wood-engravings by Lynd Ward (1905–1985) published in 1936, the monster retains the human qualities bestowed by Shelley's original story. While in the book the monster speaks with eloquence after having learned English by reading Milton's *Paradise Lost*, the first film and subsequent visual and textual adaptations of the novel eventually confined the monster to the silence of ignorance and brutality. As a reflection the creature's inner monstrosity, over time its physical appearance gradually turns more bestial than human. The modern monster has thus become a faint echo of the complex yet insightful creature that Shelley once conceived two hundred years ago. Frankenstein's monster has irreversibly left the boundaries of Shelley's 'hideous progeny' to be constantly reproduced and reinterpreted as the most popular literary embodiment of monstrosity.

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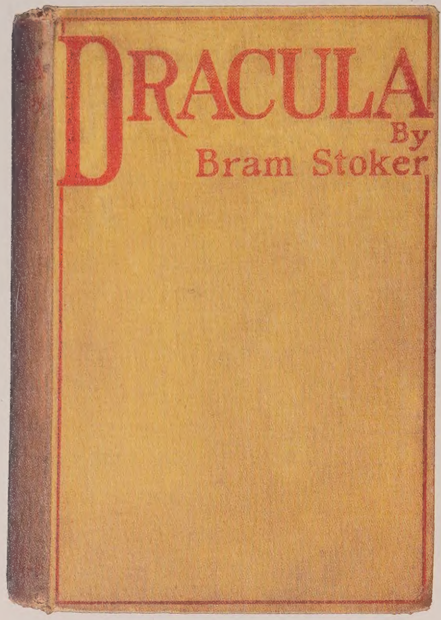
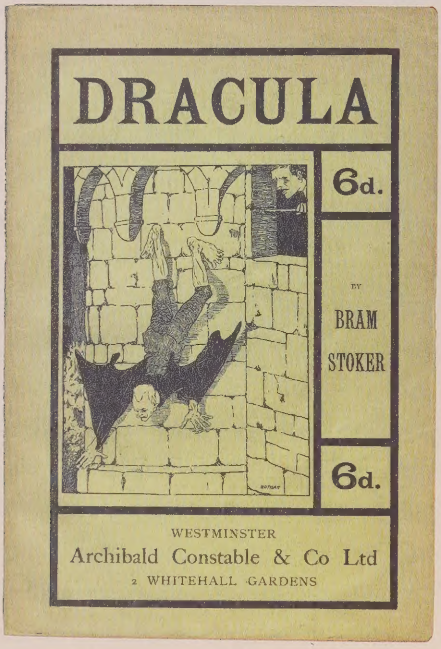
The novels of *Frankenstein* and *Dracula* are landmarks in the history of literature largely because the stories and their monsters have become modern myths.[441] Like Shelley's *Frankenstein*, Bram Stoker's *Dracula* is no longer bound to his original novel given that it has inspired a myriad of adaptations and interpretations in the last hundred and twenty years. *Dracula* was first published in London on 16 May 1897 to reviews that quickly pointed out the 'horrid' and 'gruesome' elements of a story aligned with the vampire fiction and Gothic literary tradition of the nineteenth century.[442] *Dracula* transported the ancient lore of vampires and blood-sucking creatures to a modern narrative that effectively took hold of the fears that haunted the imagination of readers of the Victorian *fin-de-siècle*.[443]

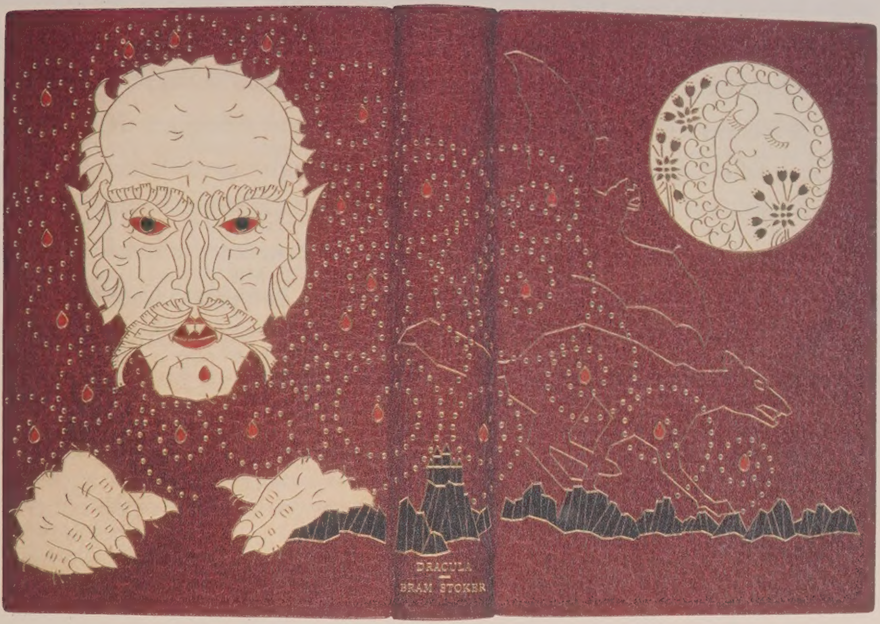
Stoker unearthed the story of *Dracula* from a rich tradition of popular, literary, and political depictions of the vampire as a metaphor for evil and corruption.[444] The vampire always defies the principles of death and life because its corpse is neither fully dead nor fully alive; its form challenges the laws of nature as its body is both human and animal; and its seductive bite is dangerous since it not only consumes the essence of life but it also has the power to eradicate humanity altogether.[445] Stoker assigned such qualities to his monster through reading contemporary vampire stories like *The Vampyre* (1819), *Varney the Vampyre* (1847), *Carmilla* (1872), and *Le Capitaine Vampire* (1879), as well as old folk tales and passages of historical books on the regions and peoples associated with the


DRACULA
By
Bram Stoker

64 Cover of *Dracula* (1897).


DRACULA
6d.
BY
BRAM
STOKER
6d.
WESTMINSTER
Archibald Constable & Co Ltd
2 WHITEHALL GARDENS

Cover of abridged edition of *Dracula* (1901).



Michael Wilcox's designer bookbinding, *Dracula* (1897).

heritage of his monster.[446] Altogether, the novel gathers numerous sources into one fragmentary narrative that contains extracts from journals, letters, news reports, and other documents uncovering the terrifying nature of the main character.[447]

The publishers of the first edition of the novel strategically chose red and yellow for the cover in order to place the novel within the genre of illicit French books and other publications known for their transgressive and decadent content.[448] *Dracula* had several editions until the 1950s when it went out of print before the story was revived by the film industry in the 1990s. The same publishers of the first edition, Archibald Constable and Company, issued in 1901 the first abridged edition of the novel. This popular edition is significant since it contains the first illustration of the Count, who appears on the cover climbing down the walls of his castle in Transylvania. The photoplay editions by Grosset and Dunlap were published to coincide with the release of the film that initiated the American boom of horror films in the 1930s.[449] These editions often contained still images from the film along with vivid dust-jacket designs which illustrated the iconography of the story. Another interpretation of the novel survives in the unique designer binding completed for a copy of the first edition in 1995 by master bookbinder Michael Wilcox (1939–). Wilcox's binding speaks directly to the story because the designs are inspired by the voices of the characters.[450] When fully open, the binding brings to life the most recognizable elements of the story: Dracula and his castle, the mountains, the animal figures of the bat and the wolf, droplets of blood and, in the distance, the female character protected by the garlic plants. Artists, writers, publishers, filmmakers, playwrights, and creators of all sorts have captured for more than a century the essence of the novel in their own interpretations of the most famous vampire of all time.[451]

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